

BED-SIDE LETTERS

ON

HYDROPATHY;

OR,

CLINICAL EXPERIENCE

OF THE

EFFICACY OF THE WATER-CURE

IN THE TREATMENT OF THE FOLLOWING DISEASES :

CONSUMPTION.

INFLAMMATION OF THE EYES.

CONSTIPATION.

DYSPEPTIC FEVER.

NERVOUSNESS.

INFLAMMATION OF THE LUNGS.

RHEUMATIC GOUT.

BY

W. ALFRED JOHNSON, M.D

Second Edition.

LONDON

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MDCCCLV.

P R E F A C E.

BELIEVING that the *first* edition of these Letters have been productive of a *certain amount* of benefit to the cause which they advocate, I publish a *second*.

W. ALFRED JOHNSON.

GREAT MALVERN.

LETTER I.

Constipation.

MY DEAR EDITOR,

When any new system of treatment is introduced to the public, there always exist a vast amount of prejudice and *feeling* to be overcome before it is possible to make the inhabitants of this sceptical world believe in its efficacy—even should it be enabled to subdue one half of the maladies to which man is subjected. When Hervey discovered the circulation of the blood, many smiled incredulously—while others, putting the most ‘charitable construction’ upon the new doctrine, only pitied the poor half-witted philosopher who could, for one instant, seriously maintain so ludicrous a theory. When Jenner first began to teach of vaccination, people, wise in their own conceit, contented themselves with exclaiming ‘What absurdity!’ and so dismissed the subject from their minds as unworthy a second thought. Thus it is but too often the case with Hydropathy, although, without doubt, this comparatively but recently-known science affords us the means of eradicating a fifty-fold greater number of

diseases than any other kind of treatment with which we are at present acquainted. In spite of the far greater advantages which this method of cure possesses over the old practice, if we take into consideration the population of Europe, but a few only avail themselves of its benefits. Should an invalid but once put himself under a *hydropathic* course, he seldom or never returns to the *old school* of medicine, thus proving that, when he becomes familiar with both, he has a much more exalted opinion of the water than the drug treatment; yet how happens it that this great discovery, acknowledged, by all who have put themselves under its influence, to be the most efficient means of alleviating suffering humanity—how is it that *Hydropathy* should only be embraced by the few? How is it that man should be so tardy in accepting this safe, and in very many disorders sure, means of putting a termination to his sufferings? There are two reasons. In the first place, a *non-acquaintance* with the *nature* of the system itself, *his mind* being consequently filled with erroneous impressions concerning it. In the second place, it is because that great and powerful barrier to the advancement and improvement of medical science, ‘*prejudice*,’ stands erect and firm across the path; so firm, indeed, that one’s reasoning powers become quite inadequate to strike down and overcome so tremendous a foe. The poor patient struggles and struggles in vain; for the monster usually obtains the mastery, and says, ‘No! thou shalt have nothing to do with Hydropathy or any other quackery’—forgetting, in toto, that the very practice which he himself upholds and sanctions is by far the greatest quackery of all.

Now, I think that our first and principal object ought to be to promulgate the *real nature* of the hydro-pathic treatment, and endeavor to get rid of this *prejudice* which exercises so baneful an influence in retarding the progress of the system, and preventing that popularity which otherwise it must, of necessity, attain. The question appears to be this—what is the best means of combating these weak and unfounded *prejudices*? It occurred to me that if a number of well-authenticated *cases* were published, the symptoms and treatment of each being accurately detailed, and if these *cases* were widely circulated and made known, they would, by being brought home to the patient, by his seeing treated and cured, perhaps, the very disease under which he himself is at that moment suffering; these cases would, I say, tend to, and in a great measure would, destroy this enormous bugbear ‘prejudice.’ We want practical illustrations. Half-a-dozen successful cases do more good towards *convincing* an unbeliever than twenty theories. For example, I suffer intolerable agony—say from acute rheumatism. I take in your Journal; there I see my own case exactly described and *cured* by the water system. Then I begin to think in sober earnest (having been drugged for ages without benefit) that it is time to give the thing a *trial*; and in hundreds of instances this would be sufficient to turn the scale in favor of *reason* against *prejudice*. Now, with your permission, I propose to send you, from time to time, for insertion in your Journal, such cases as, having happened under my own eye, I can vouch for as regards the accuracy of detail, and which I think will be best adapted for the accomplishment of the object in view;

since I purpose sending you none but those which are of extremely common occurrence, and which, from their constantly happening to thousands in every day life, will be most likely to answer the end for which I publish them. If you fall in with my views, be good enough to insert the following, and let the world itself judge whether the water-cure be *prejudicial* or *beneficial* in the treatment of at least some diseases.

CASE No. I.

‘I will go further and declare it to be my most conscientious opinion, founded on long observation and reflection, that if there were not a single physician, or surgeon, or apothecary, or man-midwife, or chemist, or druggist, or drug in the world, there would be less mortality amongst mankind than there is now.’

Dr. J. JOHNSON.

IN June, 1852, Mr. C. put himself under the hydropathic treatment. He was a gentleman, forty years of age, living in one of the manufacturing towns of the North of England. He had several public appointments, and had always led a very active life. A strong, full, broad-chested man, of very plethoric habit, about five feet ten inches in height, in weight twelve stones. The following was the history of his complaint. About twenty to twenty-five years ago, he was troubled with *constipation*. He consulted a medical gentleman, who, as is usually the custom in such diseases, administered some gentle aperient, such as rhubarb — perhaps castor oil. This having had the desired effect, he thanked and dismissed the doctor. After the lapse of

a short period, the patient found himself as severely bound as ever he was in his life; and, moreover, a little *worse* than before he had swallowed the rhubarb. He again had recourse to the physician. A second dose was given, but unfortunately with not so happy a result as in the primary instance; so it was deemed expedient to follow it up with a larger quantity, when, as was expected, the constipation was overcome. Nevertheless, in spite of these sapient measures, the obstinacy of the bowels returned. Once again the doctor was called in, and once again he flew to his favorite purgatives; but in this instance a very much larger dose was necessary to do that which the first time was accomplished by the aid of one-tenth the quantity of the same drug. Again and again the constipation recurred; and again and again the constipation was subdued: but as each succeeding attack was severer in its nature, so did it require a proportionately larger dose. And at last the bowels became so much out of order that it became requisite for the patient to take pills each and every day, the medicine still remaining some comparatively *mild* purgative.

By this means the patient got on tolerably well for a time, but despite the daily exhibition of laxatives, the intestinal tube became still more torpid; in fact, so much so that the second and stronger class of purgatives was thought better adapted to the case, such as senna and salts, jalap, blue pill, calomel, etc. These, at first, like the rhubarb, produced their magic effect. However, after the lapse of another period of time, as in the case of the *simple*, the more *powerful* class of evacuants proved unavailing, and shared the same fate.

In due season the patient had to take the *yet stronger* class of drugs, and these, not singly, but two or more in combination. Eventually, so stubborn did this constipation become, that the poor invalid was recommended to imbibe that powerfully-pernicious drug 'turpentine.' At this stage of the proceedings, he consulted all the most eminent men of the neighborhood; but although they tried every purgative they could call to mind, none were of any utility: the constipation prevailed. At length 'Croton oil,' the most poisonous and powerfully drastic the Pharmacopœa boasts, was called into the field.

Most certainly it was impossible that this state of things should have continued for so great a number of years (twenty or twenty-five), and the general health, together with the internal viscera, remain unimpaired—and so it proved. At this crisis he was seized with a great number of sympathetic disorders; the circulation of blood was interfered with; the pulse hard—as a blacksmith's hammer—beating ninety times to the minute; flushed and bloated face; the abdomen greatly distended—tympanitic as a drum. The stomach was deranged; there were indigestion, heart-burn, acid eructations, loss of appetite, and painful sense of distension, even after eating the smallest possible quantity of food. The ordinary secretions were blocked up; urine scanty, high-colored, and sedimentary; hot, dry, and parched skin—free from all appearance of its own healthy exudation. There were intense head-ache; noises in the ears; an appearance as of small irregularly shaped pieces of black muslin floating before the eyes; sleepless nights, terrible dreams, and night-mare. With all

this there was much excitement of the whole system, great nervousness and irritability.

On the morning following his arrival, Mr. C. was ordered a *wash-down* at 7 A.M., to be repeated at 11 A.M., and again at 4 P.M. He was also recommended to wear a *compress* to cover the whole abdomen; there to be worn the entire day, being wetted with cold water thrice during that time.

On the second or third day from the commencement of the water-cure, his bowels were relieved, his appetite improved, and he declared himself all the better for Hydropathy. He continued this course of treatment one week, when it was changed, taking in the morning, before breakfast, a *pail douche*; in the forenoon the *large douche*, for two minutes; in the afternoon a *shallow bath*. He pursued this treatment for the second week, when, upon examination, he declared himself to be greatly benefited in all respects. The constipation was almost gone, his flatulence much relieved, appetite wonderfully good, distension after meals greatly diminished (though the appetite so much increased), slept better, and pain in the head not so violent. Weight, eleven stones twelve pounds eleven ounces; but, though less in bulk, more firm in flesh. Continued same treatment.

It would be trespassing too much on your liberality and space, were I to describe in what particular order each individual symptom disappeared; how gradually the constipation was thoroughly and completely overthrown, vanquished, and permanently cured; how the dyspepsia, head-ache, and nervousness ceased; how the full-bloated face resumed its natural bloom of health; how the circulation of blood was regulated; how the

skin put on its normal function—nor is it requisite. Suffice it to say that the patient, after having prosecuted the system for about two months, left Hydropathy, having most entirely and most effectually got rid of that disease for the alleviation of which he had been taking physic for a period of from twenty to twenty-five years; and which physic not only utterly failed to remedy the disorder for which it was administered, but, in addition, poisoned the system to such a degree that it rendered life itself a torment and burden to the hapless individual who had been thus ignorantly maltreated.

I shall now content myself with putting down, without comment, the further treatment that he pursued up to the day on which he took his departure. He continued the treatment last mentioned till the 10th of July, when he was ordered the following:

	BEFORE BREAKFAST.	NOON.	AFTERNOON.
July 10th,	Shallow bath .	Douche (2 minutes)	Douche (2 minutes).
„ 11th,	Ditto . .	Ditto . . .	Ditto.
„ 12th,	Ditto . .	Ditto . . .	Ditto.
„ 13th,	Ditto . .	Ditto . . .	Ditto.
„ 14th,	Ditto . .	Ditto . . .	Ditto.
„ 15th,	Ditto . .	Ditto . . .	Ditto.
„ 16th, } to 24th, }	Ditto . .	Ditto . . .	Ditto.
„ 25th,	Ditto . .	Ditto . . .	Sitz.
„ 26th, } to 31st, }	Ditto . .	Ditto . . .	Ditto.
August 1st,	Wash-down and	[sitz (10 min.)	[sitz (10 minutes).
„ 2nd, } to 6th, }	Ditto	Wash-down and Ditto.
„ 7th,	Shallow bath .	Wet sheet and dripping	[sheet Dripping sheet.
„ 8th, } to 14th, }	Ditto . .	Ditto . . .	Ditto.
„ 15th,	Shallow bath	Wet sheet for half-an-	[hour Dripping sheet.
„ 16th,	Wash-down	Wash-down . .	Wash-down.
	Ditto . .	Ditto . . .	Ditto.

till the patient left.

REMARKS.

I think the preceding case particularly instructive in teaching us with what perseverance a man, suffering from a most painful affliction, will adhere to the old system of drugging, although day by day, for twenty to twenty-five years, the disease should be steadily growing worse and worse, little imagining that he himself is, through the medium of these unnatural medicaments, the cause.

If there be one disease more common than another, that disease is constipation, and the above detailed case is a beautiful—or, more properly speaking, horrible—example of that form of the affection (perhaps more frequently met with than any other) in which a case of simple *inactivity* of the bowels had, by means of drugging, been converted into the most severe and dangerous description of *constipation*. This was evidently, in the first instance, one of those numerous instances that we so commonly observe (especially among those who live in large manufacturing towns), *simple inertia* or *torpidity* of the muscular coat of the bowels—more particularly, perhaps, of the rectum. As to all the other torments that the patient suffered, they were not in themselves primary, but secondary, or *symptomatic* derangements, depending upon, and produced by, the primary disease, constipation (kept up and aggravated by the drugs): and which constipation, had it been rationally treated at the onset, might have been probably cured in a week.

The presence of the unnatural mass in the tube, and the constant irritation of the bowels by medicine,

were abundantly sufficient to account for the pains in head, etc., for that there is an immense *sympathy* between the *bowels* and *brain* is proved beyond a doubt both theoretically and practically. The most superficial knowledge of the anatomy of the sympathetic nerve shows us a direct communication of nervous matter between the alimentary canal and brain. A child upon the operating table frequently becomes the subject of a spasmodic action of the bowels, the sight of the knife acting upon his timid imagination just in the same way as an ounce of salts would upon his intestines. Claude Bernard, assisted by a friend, made some interesting experiments upon a jackass and other animals. They simultaneously opened the skull and abdomen, and found that, upon irritating the brain with a sharp instrument, an evacuation was produced from the bowels. Now of course this irritation was propagated downwards by nervous filaments, communicating with the rectum, and it is right to suppose that if an irritation could be conducted from the brain to the bowels, the irritation could, by the same channel, be conveyed to the brain. Again, how often is a head-ache relieved by operating upon the bowels?

The other abnormal symptoms were equally referable to the pressure caused by the intruding bulk; although that pressure was of a different kind, and of a more direct character. The bowels are in direct and immediate apposition with the stomach—hence, distend them, and what occurs? The stomach is compressed, and its normal action interfered with. This organ being no longer capable of performing its proper duty, the healthy digestion of the food is arrested, gases are

generated, distension takes place, and in its turn the stomach impinges upon the heart, through the diaphragm, thus causing an irregular action of the principal organ of circulation, the heart; so we get congestion and all its evil consequences.

The *disease* was constipation—the *question*, How to cure it? There are many afflictions which are acknowledged, by medical men generally, to be beyond the reach of physic as a curative agent—constipation from *torpidity* is one of these. I well remember some years ago, when going round the wards of Guy's Hospital, asking one of the senior physicians his opinion as relates to the curability of constipation of the nature just mentioned. After evading the question for some time, he confessed his belief to be that '*drugs were of no benefit in curing the disease itself.*' Of course there exist some heterodox practitioners (in this particular) who differ from the generality of the faculty, and imagine themselves capable of removing the disease through the means of purgatives: and administer them accordingly. I presume the medical advisers of Mr. C. belonged to this class. Upon what principle these gentlemen exhibit purgatives to eradicate a torpid condition of the intestinal canal, I am at a loss to conceive. What is the action of a purgative? It is simply a local irritant, and produces its effect by mechanically grating upon and irritating the mucous membrane, as a nutmeg grater would do; but after a storm comes a calm, and so, in technical parlance, after *excitement* comes *depression*, which depression shall be *proportionate* to the excitement. A man drinks wine in the evening till he becomes hilarious and excited—in fact, tipsy. The

following morning he finds himself nervous, low spirited, and as depressed as on the preceding evening he was excited. So it is with the mucous membrane, which, after having been once irritated by the action of the drugs, takes upon itself a corresponding degree of *indolence*, and the next time demands a more powerful excitant. And thus it goes on till at length it grows perfectly callous, and ceases to be affected at all; just as a school-boy dunce, who, when he first feels the end of the cane upon his fingers, flinches, and feels it most acutely; but let him be struck frequently and periodically, and his hand becomes accustomed to the infliction, and his skin hardened by the frequent blows, so that he no longer cares for or regards the chastisement: the cane ceases to punish him. Moreover, the greater number of the evacuants employed were what is designated *drastic*, which do not cleanse the *bowels* but the *blood*; they act upon the coats of the *blood vessels*, causing *them* to separate the watery part, serum, from the blood, —which passes off; thus it is that an evacuation after a drastic, such as jalap, calomel, etc., consists almost purely of water (serum from the blood) and is nearly entirely free from the true *foeculant* matter, for the expulsion of which the drug was exhibited.

Drugs will avail us nothing in the cure of constipation arising from *torpidity* of the coats of the intestines. Even granting for a moment that these same medicines do empty the canal, of what benefit is it? 'Tis true that some of the symptoms would be for a time relieved—but nothing beyond this, for the drugs could only evacuate that matter which was already accumulated in the tube, and when this has been

accomplished there is an end of it, and the bowels remain in *statu quo*—the substance again accumulates in the intestines; that peculiar diseased condition, *torpidity* of the coats, remains untouched. We might with as great a show of reason attempt to cure a sluggish heart, arising from hypertrophy and thickened walls, beating forty pulses to the minute, by means of violent exertion. During the exertion the pulse will beat more quickly, perhaps eighty to the minute, but the hypertrophy and thickened walls still exist, and after a short period of rest the heart will again contract but forty times in a minute.

Another very palpable reason why purgatives are worse than useless, is the simple fact, admitted by all, that purgatives are debilitating agents. Thus, in the old school, they are given, accompanied by bleeding, emetics, etc., to reduce the heart's action in inflammations. Everybody knows that the heart's action cannot be lowered without producing weakness; the activity of the heart is controlled and its strength diminished through sheer weakness of that organ, and consequent inability to contract with the same force. Again, the action of purgatives is to produce virtually a diarrhœa—than which nothing is so weakening. Now, the very *cause* of the constipation is torpidity—the result of *weakness*; then how can it be possible to cure that *debilitated condition* by the administration of purgatives—rendering them even more debilitated?

It being, then, a case of torpidity, or, in other words, *debility* of the coats of the bowels, our chief and only aim should be to overcome this state of torpidity or *debility*. What is required is to give strength and tone

to the whole of the intestinal tube, so that it shall, of its own nervous or muscular energy, take upon itself the peristaltic action, contract, and expel its contents. Where are we to look for this tonic effect? Not certainly in purgatives: but in that natural and powerful system, Hydropathy. Let us for one moment see in what Hydropathy really consists. People generally are totally ignorant of its real nature. Not only do I allude to laics, but also to the great bulk of the medical profession. The whole world usually imagines that putting one's self under the water-cure is synonymous with being packed all the day long in wet sheets. If an individual happen to have no friend who can teach him from experience, his only means of becoming acquainted with the *real nature* of Hydropathy is through the medium of his physician, and in all probability the medical man himself is as totally ignorant of the subject as the patient who seeks his instruction. Inquiring minds thus find a difficulty in getting at the truth: the profession does not seek it. I once knew a celebrated physician, who lived about one minute's walk from the Grosvenor Square Homœopathic Hospital. Being desirous of ascertaining the efficacy or non-efficacy of the homœopathic doctrine, I conceived the wish, to satisfy my own mind, of testing its merits, and witnessing with my own eyes the effect of the treatment. To this end I determined upon visiting the Homœopathic Institution; and, knowing that Dr. —— lived in the neighborhood, asked him the direction in which it lay. With an attitude of surprise he lifted up his hands, and with a bland smile playing upon his gentlemanly countenance, gave utterance to the following sentence:

‘*Why, sir, the fact is that we set our faces against all that sort of thing.*’ On pressing him further, he confessed that he understood nothing of the system (he believed it had something to do with small doses), and yet refused to give himself the trouble of stepping over the way and convincing himself that it was either beneficial or vicious in its principles—thus plodding on with a screen before his eyes—probably thinking the tens of thousands of homœopaths *fools*, and deeming himself the wise man—and this blindly, being perfectly unacquainted with the subject under dispute. As regards Hydropathy the same ignorance to a great extent prevails.

Hydropathy does not consist in wet sheets and sweating blankets. The baths are of many different kinds, wet sheet, douche, cold sponge, shallow, wash-down—head douche, plunge, etc.—each employed according to the nature of the disease, the condition and strength of the patient. They are not indiscriminately used—but according to the stamina of the individual, and the vigor of the constitution. Neither is it requisite, nor in keeping with the principles of Hydropathy, as is popularly supposed, for a man, when under a hydropathic course of treatment, to convert his stomach into a water butt, by the imbibition of enormous quantities of cold water. I have heard of people swallowing thirty tumblers of cold water before breakfast. This is the *abuse*, but not legitimate *use*, of cold water, and is recommended by few, if *any*, of the hydropathic physicians of the present day. When Hydropathy was first introduced into England, it was embraced by many penniless adventurers, men of no

medical education whatever, who, thinking it a plausible money-making thing, began to practise it. By these men, completely ignorant of the principles of physiology and medical learning, was the absurd custom of drinking immense quantities of cold water advocated. Happily there are but few such remaining.

Nor is Hydropathy the administration of baths alone, but these are assisted by exercise, diet, early hours, regimen, etc. These are all admirable ADJUNCTS but NOTHING MORE, for *per se* they will not cure disease. As long as people of a sickly habit and tendency to disease, live, as they commonly do, upon unwholesome and unnatural food, of course their constitutions must, to a certain extent, be impaired, and tend to counteract the curative influence of any treatment. So it is with the water-cure—and for this reason it happens, that, when we treat a patient, we immediately order him to live upon good plain and wholesome diet. For example. What can be more contrary to reason than for a patient suffering from constipation to eat (generally done) *white* bread? Such a patient should eat *brown* bread instead of *white*; not to take *brown* bread as a drug, but to avoid *white* bread, which usually even in health is injurious. White bread is made of flour from which the bran has been carefully extracted, and usually in which alum has been judiciously mixed, to impart that beautiful white color upon which bakers so much pride themselves. Now, it so happens that the beneficial properties of brown bread reside principally in this very bran so thoroughly despised, and which bran is, in fact, a *natural* aperient residing in the wheat: and we can

have no more reason for withholding it than we have for abstracting the *albumen* from the flour, which is the natural *nutritive* part of the wheat. Constipation is a disease from which most animals, as the horse and cow (though subject to so many diseases), appear to be nearly exempted. And why? Because the horse wisely eats the husks (bran) of his oats, and the cow does not despise nor reject vegetables. In the same way as man and other animals have their natural purgatives, have birds, in the shape of small pebbles (gravel), which one constantly observes them picking up and swallowing. On the other hand, alum is an undoubted astringent; so that, when a person partakes of white bread, not only is he deprived of one of his natural purgatives—bran—but also takes, with every mouthful of bread, a quantity of alum—an astringent.

The public generally believe that the most *nutritious* food is the most *wholesome*. Such a belief is an error arising from a misconception, namely, that food has but one object, the building up of the body, and the renewal of the system. But the truth is, that food has many functions to perform besides the augmentation of the frame, as respiration, fæcefication, etc. Food contains albumen (for the building up of the frame) starch, fat (for the generation of heat), salts, etc., and likewise indigestible matters which act as purgatives. If man were to eat nothing but of the most nutritious description, he would subsist (*for a time*) upon the white of egg (albumen); but the consequence would be death. Were all the purgative principles extracted from one's diet, the whole race of man would become constipated. If any one will for a moment observe the little bird in

the garden, he will perceive him frequently picking up small pebbles and swallowing them. They are his natural purgatives, and so the indigestible matters (as bran) found in bread and vegetables are the natural purgatives of man.

But, after this somewhat of a digression, let us return to hydropathy as a remedial agent in constipation. The disease being *debility*; a *tonic* treatment is demanded; to arrest the progress of the affection, and impart strength to the tissues disordered. Hydropathy, possessing, among other virtues, tonic properties, is enabled to cure this constipation. Mr. C. not only took topical baths in the shape of cold water bandages, but also employed general baths for the benefit of his health. No one will deny that the coats of the bowels form part of the whole animal economy. Then, if we improve the health and strength of the patient; if we improve the health and strength of the stomach and digestive organs; if we improve the health and strength of the nervous system; if we improve the health and strength of the heart—thus equalizing the circulation; if we improve the health and strength of the blood itself, from which all the animal tissues are formed; if we improve the health and strength of the entire man (all of which changes were undeniably effected), then the coats of the intestines forming a part of that entirety, must, in common with every other organ of the body, be benefited.

A broad bandage, wetted in cold water, applied all over the diseased contents of the abdomen, at once becomes a direct and really efficient *tonic* to brace up and restore the lost condition of *tonicity* in the coats of the intestines. If a piece of india-rubber should, from any

cause, become relaxed, and lose its elasticity, plunge it into cold water, and we observe it almost immediately to regain its tone and become firm—to recover its strength and become once again elastic. Precisely after the same manner do the *bowels* recover their normal tonicity and elasticity which keep up the healthy vermicular action.

The *sitz-bath* was employed—not so much for the removal of the constipation, as to combat those distressing symptoms in the head of which the patient so much complained, and for the alleviation of which the *sitz-bath* is a specific in hydropathic practice.

By these processes Mr. C.'s constipation was cured; and I would put it to your readers whether this is not a far more rational method of treatment in this complaint than the old system of eternally poisoning the bowels, and undermining the constitution of the patient, by strong drugs;—which, as I have before shown, can only evacuate the matter already eliminated, and are utterly inefficient in destroying that *debility* of the *coats* of the intestines, which is the true and only cause of the disorder.

‘The cold-water cure, or Hydropathy, though not yet admitted by the medical profession among the legitimate means which may be beneficially employed in the treatment of diseases, undoubtedly includes powerful therapeutic (i. e. healing) agents, which, in the hands of the educated and honorable practitioner, might be most beneficially resorted to as remedial agents.’

Dr. PEREIRA.

Yours sincerely,

W. ALFRED JOHNSON, M.D.

LETTER II.

Consumption.

'Thousands are slaughtered in the quiet sick room.'
FRANKS.

MY DEAR EDITOR,

This month I send you the following successful case of phthisis, which was treated hydropathically.

Mr. T. W—— put himself under the cure on the 24th of June, 1853. He was a gentleman of dark complexion, eyes, and hair which is remarkably soft and silky. A young man, about thirty years of age; height, five feet six inches; of rather a contracted chest, but otherwise well proportioned. Scrofula has been in the family. Formerly he had led a rather free life, till about two years since, when he entered business for himself, and since then has worked at it very rigidly. About seven or eight months ago he caught cold from exposure to the inclemency of the season. Shortly afterwards he complained of a cough, slight at first, but quickly increasing in severity. From this time he

rapidly grew worse, so ill, that he was induced to try the effect of hydropathy, having formerly been successfully treated for some other affection. He came; when, upon examination, he was found to have ulceration of the apex of the left lung. There was dulness or percussion, and, on the application of the stethoscope, large and loud mucous râles were discovered in the part affected; puerile breathing in the neighboring tissues. His pulse was frequent, about ninety, small and weak; the cough constant, and he expectorated the characteristic mucus from the lungs: was very much troubled with night perspirations, and slept badly. There were pains in the abdomen, side, and hip; also considerable constrictive pain in the thoracic region, with a sensation of choking in the chest, accompanied by short breathing, which was easily augmented into distressing dyspnœa. He likewise complained of short sharp pricking pain at the top of the left clavicle. He was exceedingly thin and emaciated, having lost flesh to a large amount, then being only seven stones ten pounds in weight. His debility was extreme—unable to walk more than about one mile, and that with difficulty, and at a snail's pace. Before trying hydropathy he consulted his medical attendant, who treated him with the usual routine of practice, but, unfortunately, without any good result, for Mr. T. W—— left in a worse condition than before he prescribed for him.

I now give an abstract of the treatment pursued, and also of his relative weight every Saturday, when he was weighed.

	WEIGHT. lb. oz.	BEFORE BREAKFAST BATH.	NOON-BATH.	AFTER-NOON BATH.
June 25	7 10 0		Wash-down.	Half-wet sheet for 40 minutes, to be followed by wash-down.
July 2	7 11 12		Wash-down.	Half-wet sheet 40 minutes, followed by wash-down.
July 9	7 12 12	Wash-down.	Wash-down.	Half-sheet 40 min., followed by wash-down.
July 16	8 1 4	Wash-down.	Wash-down.	Half-sheet 40 min., followed by wash-down.
July 23	8 3 0	Towel-pack one hour, followed by wash-down.	Wash-down.	Towel-pack for one hour.
July 30	8 4 0	Ditto.	Wash-down.	Towel-pack, followed by wash-down.
Aug. 6	8 5 12	Wash-down.	Wash-down.	Half-sheet, followed by wash-down.
Aug. 13	8 3 4	Wash-down.	Wash-down.	Towel-pack, followed by wash-down.
Aug. 20	8 4 4	Wash-down.	Wash-down.	Towel-pack as before.
Aug. 27	8 7 4	Wash-down.	Wash-down.	Towel-pack as before.
Sept. 3	8 8 4	As before.	As before.	As before.
Sept. 10	8 9 4	As before.	As before.	Wet sheet 40 minutes.
Sept. 17	8 10 0	Wash-down.	As before.	Towel-pack one hour.
Sept. 24	8 10 8	Wash-down.	Shallow-bath.	Towel-pack, followed by shallow-bath for 10 minutes.
Oct. 1	8 12 8	Wash-down.	Shallow-bath.	Towel-pack, followed by shallow-bath for 10 minutes.
Oct. 8	9 0 0	Wash-down.	Wash-down.	Towel-pack 40-min., followed by wash-down.
Oct. 15	9 1 4	As before.	As before.	As before.
Oct. 22	9 2 4	As before.	As before.	Towel-pack, followed by shallow-bath.
Oct. 29	9 4 0	As before.	As before.	As before.

After Mr. T. W. had been under the influence of hydropathy for a few days he began to feel better, and had already regained some of his lost flesh. His pulse became quieter and appetite improved. When, however, he had completed a month's treatment, a sort of *crisis* was established, which showed itself in the form of an aggravation of the symptoms. As this is of very common occurrence, whilst undergoing the water-cure, it was thought of but little importance, and the treatment was pursued uninterruptedly. This state of things continued a short time, and he again rallied. From this time he steadily and rapidly improved; the pulse again becoming slower, and firmer; the cough less frequent; the expectoration decreased, and losing its unhealthy character. I will not occupy your space by tracing the course of each symptom, the manner in which they gradually subsided, and the date of their disappearance. It is quite sufficient to say that he has now lost his unfavorable symptoms. His cough has vanished; pulse not more than about eighty; the pains in the chest, abdomen, and hip have gone. He sleeps well; walks well (to the extent of nine or ten miles a day) without any pain or inconvenience; has gained twenty-two pounds in flesh; and, in fine, he says that, with the exception of a little wheezing in the morning, he is, to all intents and purposes, thoroughly well.

REMARKS.

It by no means unfrequently happens among hydropathic patients, if they should chance to feel themselves a little worse after having tried the system for a short

time, that they lose confidence, abandon their good resolution, and forsake the treatment, declaring that they have no faith in the water-cure. But this is a fatal and near-sighted philosophy, for this result occurs very commonly—indeed, in the majority of cases, for it is certainly not to be expected that an old standing disease—an affection that has probably lasted for years—should, from the very day of commencement of the treatment, begin to mend, and so continue its onward course without any relapse. This result cannot be ensured by any method of treatment whatever; were it otherwise, it would partake of the nature of a miracle, which hydropathy does not pretend to perform.

Ninety-nine diseases out of a hundred can have their origin traced to some disorder of the blood; it may be too thick—so thick, that the heart cannot propel it with sufficient rapidity through its vessels: so causing congestion, etc. It may be unnaturally thin, watery, and deficient in red globules, thus producing anæmia, etc., or it may be poisoned, as in ague, cholera, or fever.

Consumption is indubitably a blood-disease, all its symptoms arising from a poisonous matter circulating through the system with the blood; the poisonous matter in this case being denominated tuberculous. Now this deleterious principle may be present in the system for a long time—even years—without producing any ill consequences: but the whole of this time it is gradually depositing itself in the various glands and organs of the body; at first in very minute particles; each becoming a nucleus, around and upon which other minute particles are slowly but surely deposited, till at length, sooner or later, according to the strength of the

constitution, they attain the size of a millet seed—hence the term miliary tubercle. Thousands of these small tubercles may remain distributed throughout the lungs, or almost any other organ, in a perfectly dormant or quiescent state, still yet not suspected; when, eventually, the unhappy subject either catches cold, or exerts himself to an unwonted degree; or from some cause, whatever it may happen to be, an irritation is set up within the system; and this irritation quickly extends itself to these little torpid, quiescent tubercles; and then it is that they become excited, and take upon themselves an active form of inflammation. From the tubercles, the inflammation passes on to the air-cells immediately surrounding them; and, after this state of things has lasted some time, the second stage—that of *softening*—commences. The tubercles now become ulcerated: the ulceration, in like manner as the inflammation, does not confine itself to the tubercles, but rapidly attacks the tissue in contact. The tubercles and cells together are broken up and consumed by the devastating ulceration, and converted into pus—which pus is coughed up and expectorated. And in this way it is that a cavity is formed in the lungs.

At last, should the case terminate unfavorably, the fatal hour arrives, and the patient dies—dies partly worn out from exhaustion, and partly from the presence of that deleterious gas, carbonic acid, in the system; for the heart still keeps pumping and driving the blood into the lungs; but they, being riddled with holes and full of cavities, are no longer capable of decarbonising that blood, so that the vital fluid is compelled to pass on through the lungs into the general

circulation, in an impure and poisonous state; the office of the lungs being to purify and convert the black venous into healthy, red, arterial blood; thus rendering it in a fit condition to nourish and build up the system.

When consumption has gone on to such a degree that *large and decided cavities* have been formed in the substance of the lungs, I believe that no method of treatment, at present known to us, will be found capable of arresting its progress; but I also believe that, when consumption is in that incipient state in which tubercles have been deposited, even to a considerable extent—the disease still advancing—but in which, as yet, no great cavities have taken the place of the air-cells—then I believe that consumption is as decidedly curable by the *water-cure*, as it is decidedly incurable by allopathy, the drug-cure.

Every medical man admits consumption to be a disease of the blood—all the symptoms of the affection produced by a poison floating in that fluid: then, without a doubt, every medical man *ought* to admit that the only way to cure it must be by purifying or CURING the blood; yet, strange to say, the allopathic physician treats the case as if denying the proposition, instead of upholding it, as he does. All his efforts are directed, not to the blood, but to the lungs and heart, forgetting that the disease of the lungs is secondary, and only depending upon the primary cause, viz.—blood. Cure the one, and the other will cure itself. How is it possible to eradicate a weed in the ground without uprooting the seed from which the weed springs? Lop off the head of a thistle (avoiding the root) and you destroy it: but the following

spring another head will have taken its place, and be as vigorous, and probably even stronger than before. Destroy the root—the whole thistle dies never to return.

No drug, or combination of drugs, possesses the power of charming away the tuberculous matter from the blood: there is but one treatment which will do so, and that is hydropathy.

Let us for one moment take a glance at the nature of the allopathic practice. It is this—a person affected with consumption consults his physician, who, probably, in the first instance, will order the apothecary to abstract a few ounces of blood—perhaps seven or eight—and this to be repeated occasionally. He may also recommend cupping, also a blister—in the ordinary way, or by means of tartar emetic rubbed upon the chest till the usual effect shall be produced. He will likewise prescribe digitalis combined with nitrate of potass; also ipecacuanha, conium, belladonna, or prussic acid. Then, after having undergone this treatment some months, if he should be no better, generally the patient is sent to some hot climate, as Madeira.

This is what is termed orthodox treatment of the first stage of phthisis. Now, what is the effect of this treatment? First, of blood-letting? It is said to be employed to reduce the heart's action. Why reduce the action of the heart? The question is, by what means are we to abstract the poisonous tuberculous matter from the blood, which causes the acceleration of the pulse? As long as the poison is in the blood what can it matter whether the heart takes two, or two^{or} minutes and half, to propel it through the system? Digitalis is given, as bleeding, to act upon the heart—but it is combined with nitrate

of potass to prevent accumulation. There is a certain class of drugs, such as mercury, colchicum, etc., which, although given in very small doses, are liable to accumulate in the system, and several small doses acting together often unexpectedly produce effects precisely similar to those which would appear after the administration of a poisonous dose. Digitalis is one of these.

Besides being sedative in their action upon the heart, blood-letting and digitalis are extremely debilitating upon the whole economy. If it be the object of the orthodox practitioner simply to reduce the heart's action, why not look for some less dangerous means to accomplish this end than the abstraction of the 'vital fluid,' of which the patient has already much too little, or the exhibition of a drug so likely to poison him as digitalis? Will not the *wet sheet* reduce the pulse and circulation? Undeniably it will; but it *will not* produce that dangerous weakness which is so greatly to be dreaded in consumption; nor is it liable to poison the patient as *digitalis*.

I do not believe that blood-letting in consumption tends, in the smallest possible degree, to control the ravages of that disease; but I do most truly believe it to be a dangerous and vicious custom, liable to produce the most serious and fatal results; for one or more of the following disasters are very apt to supervene upon that practice. 1st. *Strombus*, where the vein rolls under the lancet so that the orifices do not coincide; the fluid is effused under the subcutaneous tissue, thereby producing a blood tumor. 2nd. An artery may be punctured through the vein, giving rise to aneurismal varix, where the arterial blood mixes with the venous.

3rd. We may puncture a nerve, and so give rise to severe neuralgic pains. 4th. We may get suppuration and secondary hemorrhage. 5th. We may get phlebitis. 6th. We may have erisipelas. 7th. We are in danger lest an abscess should form from having wounded the fascia. 8th. We are liable to produce fatal syncope, where the patient faints, and never recovers. 9th. Excessive irritability of brain and convulsions. 10th. General loss of tone, nervous irritability, giving rise to passive dilation of heart, and asthenic palpitations. 11th. Dropsy. 12th. General neuralgic affections.

This is what the LANCET *may* do—the WET SHEET *cannot*.

The next remedy ordered is a *blister* upon the chest. I have only to relate a little anecdote, in connexion with blistering, to prove, to my mind at least, its inefficiency. When a student, some years ago, at Guy's Hospital, it was my custom to go round the wards daily to examine the patients with the physicians. One day I accompanied Dr. A——, when, happening to come to a patient suffering from an attack of bronchitis, he turned round to the students, and exclaimed: 'Now, gentlemen, if you blister this man you'll kill him: for what can be more absurd than, when there exists inflammation and irritation, to apply a blister, by which means you can but increase that inflammation and irritation?' When I heard this remark I said to myself, 'Surely this hospital physician is very *heterodox* in his sentiments, for he denies the grand principle of counter irritation.' I determined to make some further inquiries. The following day, when going round with Dr. B—— (another hospital physician), I took the opportunity of asking him if he

recommended blistering in bronchitis. He replied, 'Whenever there is inflammation within, I like inflammation without.' The next day I asked a third hospital physician, Dr. C——, his opinion. He told me that he never blistered in a case of bronchitis till it was reduced to the sub-acute stage; or, in other words, when the disease was rapidly *getting well*, then he put on a blister. Here are three physicians, one of whom, celebrated for his medical acquirements, says, 'Blister him, and you kill your patient;' another, equally celebrated, says, 'Invariably blister;' while a third says, 'Put it on when the disease has subsided' (and the patient is getting well).

In consumption, the blister is given with exactly the same indications as in the case of bronchitis; ergo, if applicable to the one it must be to the other. When there is so much disagreement touching the application of such a violent remedy, 'tis surely better left alone. Most certainly the blister on the chest will not expel the poison from the blood.

The next points are the ipecacuanha, conium, belladonna, and prussic acid. The three latter medicines are all of them narcotics—and are given—the belladonna, to quiet the system; the conium and prussic acid are *supposed* to exert some specific influence in checking the cough. The ipecacuanha acts upon the mucous membrane. So that of all these drugs (and some of the most dangerous description) not one is given with the view of abstracting the materies morbi (tuberculous matter) from the blood, which is the 'fons et origo mali.'

In the last place. If he do not mend, when the doctor and patient get mutually tired one of the other, a

sojourn in a hot climate is recommended—as Madeira. A hot climate is thought to be beneficial in its action. What is the effect of heat upon the lungs? Relaxing and debilitating in the extreme. That it is so there cannot be a doubt. If a delicate person go into a heated atmosphere, he very often faints, for the heart beats so feebly that it is unable to propel a sufficient quantity of blood to the brain to stimulate it. How languid does a person feel on an unusually hot summer day! In Madeira there is a series of these hot days, even many degrees hotter than are our dog days. Let a person, troubled with a hacking consumptive cough, go into a hot ball room, and he will immediately begin to cough. A man puts his arm out of joint, which proves difficult of reduction; we put him into a hot bath, and commonly succeed in at once reducing the dislocation. This result, of course, arises from the relaxing nature of the heat—the water being simply the means wherewith we apply it. When an invalid is ordered a hot bath he not unusually has a fainting fit. Another effect of heat is to bring on diarrhœa—the common diarrhœa of summer being produced by the hot weather, and not by the fruit as is generally supposed to be the case. And what so weakening as diarrhœa? However, I have no space to go into this question. Again, heat increases the action of the heart. We all know that the pulse beats more rapidly in a warm than cold atmosphere, for caloric is an excitant, and cold a sedative. This hot climate, by quickening the rapidity of the pulse, must act in a way the very reverse from the former—bleeding, digitalis, etc., which were given to lower the heart's action. Three-and-a-half pulsations are equal to one respiration:

this is the natural ratio of the heart and lungs. That is to say : every three-and-half beats of the heart send a sufficient quantity of blood to the lungs to be aërated by one respiration. When the blood flows quicker than ordinary the lungs must pump more rapidly to keep up this balance, or else more blood will be driven into them than can be made arterial ; and, consequently, impure blood will then circulate through the system in a poisonous condition. And (as it happens when a patient is sent to a hot climate) the circulation increases, and Nature, in her kind endeavors to prevent the unequal action, causes the respiration to become more rapid in proportion ; but, in a case of consumption, the rotten, debilitated lungs are not able to bear this increased exertion, and the result of this undue action cannot be otherwise than injurious.

All the principal remedies that I have as yet mentioned are *debilitating* in their effects upon the constitution. Now, generally speaking, a person afflicted with consumption is already but too pale, emaciated, and weak : but, surely ! these orthodox drugs must necessarily make the poor patient paler (from paucity of blood), more emaciated, and weaker. The very tendency of the disease itself is to produce, to an alarming extent, debility and exhaustion : under which he often perishes. Then, ought we not rather to administer tonics whereby the constitution is strengthened and rendered better capable of resisting that fatal tendency—debility ? But no ! in the old school, with astounding perseverance, do they continue pouring in their vicious debilitants, till at length the constitution is so cut up and destroyed that, whatever chance there might formerly have been

of cure, there is now none ; and the miserable sufferer falls a victim to this orthodox homicide.

There is one other remedy which has lately been introduced by medical men, in the treatment of consumption, that I have not yet mentioned, namely, 'cod's liver oil.' Occasionally we observe, in the field of medicine, the appearance of some drug which is declared to possess most magical and extraordinary virtues for the cure of a certain, or many diseases. However, these peculiarly excellent virtues seem to be of the most evanescent quality, for, unfortunately, the newly-discovered panacea lasts but only a very short season, then droops its head, and modestly retires into oblivion. Its life has been transient but brilliant. These drugs are what are appropriately termed '*fashionable nostrums*,' and '*cod's liver oil*' is to be ranked among them. Some two or three years ago, Dr. Owen Rees discovered lemon juice to be a mighty agent in the cure of rheumatism. His friend Dr. Babington quickly took up the case, and followed in the footsteps of his colleague. The effect of this lemon juice was said to be truly astonishing, and, consequently, a lemon juice fever seized the profession, each member exhibiting the newly-found wonder in every case of rheumatism that occurred in their practice. It answered admirably ; never was there such a remedy since the flood. Gradually, after the lapse of a month or two, when the excitement had somewhat calmed, and the mania to a certain extent cooled down, one of the profession, as the Fates would have it, began to doubt (though probably with much trembling and trepidation for entertaining such a wicked idea) whether, after all, 'lemon

juice' were the all-powerful remedy it was said to be ; and with great hesitation ventured again to prescribe that 'old established favorite,' colchicum. The patient recovered, in the usual time ; and, ever since, this member of the faculty has continued to administer colchicum. The first blow was struck. One hospital physician, Dr. B., declared that by some strange fatality, 'lemon juice in his hands appeared only to be beneficial in the cure of rheumatism when the patient happened to lie in "Lydia" ward.' The example, once given, was quickly followed by other medical practitioners ; and now, the momentary flash and smoke having cleared away, the big 'gun,' is silently wheeled off, and quietly buried in the recesses of forgetfulness.

About the same period Dr. Warburgh arrived in England, to exhibit to his medical brethren the marvels of a certain medicine. This was 'Warburgh's Tincture,' reputed to eradicate almost all the disorders under Heaven ; but that for which it was most peculiarly adapted was the cure of ague. Now, the common drug given in this complaint is quinine. Well, this Warburgh's Tincture (similarly to the *lemon juice* in *rheumatism*) accomplished miracles, charming away the ague in a miraculously brief space of time. It was given with great perseverance, especially in Guy's Hospital, and found to check the malady with unparalleled rapidity. The now *old fashioned* quinine had given place to the unrivalled '*Warburgh's Tincture*.' I am told that this *potent draught* has since been analyzed and found to contain, as its chief ingredient, 'QUININE.' I need scarcely add that Warburgh's Tincture

has now, in its turn, become 'unfashionable' and but seldom mentioned.

Then came the far famed *cod's liver oil*. The remedy was at last found sufficiently powerful to conquer that dreadful disorder, to which nearly one-third of the whole population of England fall victims—consumption of the lungs. However, this *next fashionable nostrum* shared the usual fate of *fashionable* nostrums in general, and, after having been in vogue for some little time, was thrown aside to make room for the *still more recent fashionable nostrum*, '*cream*,' which has now almost entirely superseded the use of *cod's liver oil*. How long *cream* will be considered, 'par excellence,' THE specific for consumption, it is difficult to foretel. There is one consolation for those who take 'cream' for the purpose of getting rid of their consumption—namely, that it contains nothing particularly *powerful* or *injurious* in its composition; and let us hope that this 'cream' may never be replaced by any drug more pernicious to the system.

This is an illustration of the orthodoxy of the orthodox faculty.

'Physic! a freak of times and modes,
Which yearly old mistakes explodes,
For new ones still absurder.
All slay—their victims disappear,
And only leaves the doctrine clear,
That killing is no murder.'

The principal effect of cod's liver oil is to fatten the patient who drinks it; which fact is, I believe, fully borne out by the statistics of the Consumption Hospital. Oleaginous or fatty substances, administered internally,

will generate fat; and cod's liver oil will *do this*, but *nothing more*. It will surround the lungs with fatty deposit, but it is quite incapable of building up and healing the torn and disrupted air cells; neither does it possess the power of cleansing or altering the nature of the blood in which the deadly poison floats.

Since we have seen the effects (at least a few of them) of the allopathic treatment in an ordinary case of consumption, let us now, in a very few words, take a passing glance at the nature of the hydropathic practice in a similar case of consumption. A man, in the first stage, is usually ordered the wash-down or shallow bath, and wet sheet packing. The effect of the wash-down is a tonic, bracing up the nerves and giving tone to the system, thus causing the patient, after each bath, to feel a sensation of strength and buoyancy. It also acts powerfully upon the perspiratory ducts—immediately through the skin. In this disease, these glands are almost invariably affected,—being weak and relaxed during the night—constricted during the day time. If the kidney, spleen, liver, or any other secretory organ, takes upon itself an abnormal action, we at once endeavor to correct their diseased condition; yet when *the skin and the thousands of secreting glands* therein placed, and which excrete matter to the extent of several ounces daily, become affected, we (that is, in the old school) pass them over as things of but little importance. When the bowels are relaxed we try to *astringe* them; then why should we not try to *astringe* the perspiratory glands when *they* are purged? In the hydropathic treatment we do accomplish this, by means of the wash-down, etc.; and, given with this intention,

it is a most serviceable bath in the night, when the patient is bathed in a profuse exhausting perspiration. The continued daily application of the wash-down effects a radical change by setting up a new and healthy action.

The next bath is the *wet sheet packing*. In consumption this is a most valuable bath, and performs its duty in many ways. It soothes and quiets the agitated nervous and muscular system, thereby checking the cough, and very often inducing a calm, refreshing sleep, out of which the patient awakes cool, and very much relieved. This bath is usually employed for a period varying from twenty to sixty minutes, according to his stamina and strength of constitution.

A second effect of the wet sheet is to reduce the feverish state of the system, which is generally present. It conducts away the heat from the hot, dry, and parched skin (just as a piece of cold marble, when held in the hand, draws out the caloric, and makes it feel cold), making it cool, soft, and comfortable. But another and grand action of this remedy is, that it abstracts the poisonous tuberculous matter from the blood, thus striking at once at the root and foundation of the disease. I know of no remedy but the wet sheet which is capable of this.

After a man had taken a long course of mercury (for several months) and lain in the sheet for an hour, I have seen that sheet, from white turn to a perfectly pink color—as evidently pink as the rose. What can produce this remarkable change of color? Is it due to the perspiratory fluid? No! for this fluid is white. Then it must be from the blood: and if from the blood,

to what principle of it can it be traced?—the coloring matter? Sometimes, but not necessarily so; for the sheet is often stained with different colors, as green or blue. If not the coloring, it cannot but be the *poisonous* matter of the blood that gives this appearance to the sheet. The following well-established theory of *Endosmose* and *Exosmose* will sufficiently well account for the phenomenon. When two fluids of different densities are only separated by a porous animal membrane, they will, by means of the pores, exchange places one with the other. For example: take a sheep's bladder; half fill it with treacle, tie it up at the neck, and place the whole in a basin containing a quantity of milk. After it has stood some little time, the milk in the basin will gradually become tinged with the treacle flowing out into the milk; and the milk will, likewise, forcing itself inwards, dilute the treacle. The force by which the milk makes its way into the bladder, is termed *Endosmosis*, and that by which the treacle enters the basin, *Exosmosis*. The fluid of lesser specific gravity flows more quickly than that of denser weight; so that, in this instance, the bladder will become eventually distended, and, if left long enough, burst.

When we apply the wet sheet packing to a person suffering from consumption—the skin becomes the animal tissue—the water in the sheet, the fluid of lesser specific gravity—and the serum of the blood, in which float the coloring and tuberculous matters, the denser fluid. Here we have all the conditions requisite for the carrying on of the process. By this means, combined with the various other hydropathic processes,

we are generally enabled to baffle this *first stage* of *incipient* phthisis.

‘Upon the discourse I had with you upon your design of writing a small tract on that noble subject of cold immersion, a practice so old in the world, almost forgotten, as if it had been dead and buried through extreme age and superannuation; according to my promise I now present you with some few lines touching some wonderful cures done by (the amazing effects of) cold water; such only as have fallen under my own eye and observation.’

Dr. BAYNARD.

Yours sincerely,

W. ALFRED JOHNSON, M.D.

LETTER III.

Gastric Fever.

‘More infantile subjects are, perhaps, diurnally destroyed by the mortar and pestle, than in the ancient Bethlehem fell victims in one day to the Herodian massacre.’

REID.

MY DEAR EDITOR,

I enclose you this month a remarkably interesting case of gastric fever.

About two months since, I went to visit a little girl of the name of Sarah Viney. She lived at Hockley, near Birmingham—a child of humble parentage. Upon my arrival, I found the little patient lying upon a temporarily-made-up bed, placed in a corner, in close proximity to the fire, although the room was small, and the day genially warm. She was a small, puny, irritable child, aged four years and a half. Her mother informed me that she had been ill four weeks; that she was liable to fits (epileptic) by which she was convulsed several times during each day; that she had suffered from diarrhœa, for which she had taken some ordinary medicine, but that this appeared to have been

productive of no good effect: for the child, up to this time, had steadily grown worse. She had also passed ascarides, which, upon inspection, proved to be the *ascaris lumbricoides*.

When I examined the child, it appeared to be a case of irritative gastric fever, of a very severe remittent type. She was extremely thin and emaciated, with great pallor of countenance, hollow cheeks, and sunken eyes, and in the centre of the pale, pasty face, there was a bright red hectic patch on either side. A high state of fever, with hot, dry, and parched skin; pulse, very rapid, beating 125 to the minute, small, thready, and scarcely perceptible; tongue, teeth, and inside of lips, black and covered with sordes—from the incrustation of salts and suppression of the salivary secretion. She was tormented with a hollow dry cough. The abdomen large, hard, and prominent, with excruciating pain and diarrhœa. There was great thirst, and entire loss of appetite, much restlessness and irritability. The head was likewise implicated. She would awake from a dreamy uncertain sleep with a shrill scream, as if suffering from great pain; at times, especially in the night, she was completely delirious. There was pain in the head, jactatation, tossing about of the arms, the thumb screwed into the palm of the hand, and the pupil contracted—all plainly indicating that the membranes of the brain had become affected. In fact, it was as severe and dangerous a case as it has ever been my misfortune to witness.

As to treatment, the child was at once carried away from the fire, taken into a room upstairs, put upon a bed between two open windows, all the clothes removed,

with the exception of her night dress and light counterpane : then the door of the apartment was thrown back as far as possible, and left open. A cold water *compress* was ordered immediately to be placed all over the fore and back part of the head ; to be repeatedly changed (as soon as it became warm—about each quarter of an hour), and worn night and day. After the lapse of half an hour the patient was wrapped in a *wet sheet*. She remained in this for twenty minutes—and, directly after, followed the wet friction for four minutes. These two processes were repeated three times during the day. In the evening the child had a compress applied which entirely enveloped the abdomen, there to be worn during the whole night. Her diet consisted of food of the lightest description, such as barley-water, etc.

The day following this treatment the fever was to a slight extent diminished, the pulse not quite so frequent, nor the delirium so complete. The treatment was ordered to be continued. On the second day, a decided improvement manifested itself—the pains in the head, as well as abdomen, were considerably relieved ; the heat of skin much less intense ; pulse 110, firmer, and of more decided character ; the diarrhœa arrested. Day after day the patient rapidly grew better and gained strength, and, by the eleventh from the commencement of the hydropathic treatment, the fever, pains, delirium, etc., had entirely left : she was pronounced convalescent ; and, in a few days more, was perfectly well—to use her mother's words, 'as fat as a little pig.'

REMARKS.

As no untoward symptoms arose, no change of treatment was necessary, so that the same was continued throughout the duration of the disease. I omitted to mention, when speaking of the treatment, that the patient was permitted to drink freely of cold water, a privilege of which she eagerly availed herself. Now, there exists in the minds of unthinking men a strong prejudice against the imbibition of cold water when suffering from an attack of fever. Why I am at a loss to conjecture; but such is certainly the case. It is at length admitted by many—and that of the old school of practice—that the external application of cold water to the surface, in certain cases of fever, is attended with beneficial results, and that these results are traceable to the abstraction of the caloric from the skin. But, in this disease, this is not by any means the only organ that is inflamed and heated, for, as Fordyce says, in fever every organ in the body is implicated, even up to the blood, bone, ligament, and muscle. The mucous membrane of the stomach is also inflamed and attacked with fever, and it is proved to be so, beyond the shadow of a doubt, by the state in which we find the mouth—being hot and dry: and the same membrane that lines the mouth descends in a continuous tract, and also covers the internal coat of the stomach. Then, if it be a good and judicious practice to allay the heat of the skin by means of cold water, surely it must be equally good and judicious practice to reduce the heat and fever which have attacked the stomach. Let us not be contented with doing the good work by halves: when

two fires are burning, quench them both, and rest not satisfied with the endeavor to extinguish the external one only—while there is another fiercely raging within. Ever provident nature calls with a loud voice for water to assist her in cooling the parched and burning tongue; yet man, wrapped up in his own ignorance and bigotry, folds his arms, and mercilessly withholds it. The same antipathy to water is observable when the body is heated from exertion—as when brought on by exercise, etc. It is accused of producing gastritis (inflammation of the stomach). I have questioned scores of medical men as to whether they ever met or knew of a case of this nature, which had its origin from this cause. Their answer is invariably ‘no’; but add, at the same time, that it must be a very dangerous custom,—and will often mention a case that they had read in some book where such an occurrence is detailed. Inquire further, and the same medical man will acknowledge to have witnessed, with his own eyes, several instances where water has been drunk under similar circumstances, and where no ill effects have accrued. He attaches no importance whatever to the latter fact, *where several persons* took the water without any injurious consequences, but places his whole and entire reliance upon the former case, in which one *single individual* ONCE DRANK of some, and whose act was ONCE (perhaps) followed by gastritis—completely ignoring the *rule*, and regarding merely the *exception*, which is only just sufficient to prove it. By the same argument, one must never order a leech, because a child once died after its application. We must no longer be surprised that the science of medicine marches so tardily when it

is practised by reasoners of this kind. I have noticed hundreds of persons who, when they have been heated to the fullest extent, have drunk largely and repeatedly of the coldest water; but never yet have I observed any ill effects from so doing.

I do not for one moment deny the fact of persons having died, and that more or less suddenly, after having drank of cold water when the body has been in a heated condition; but I do deny, in toto, that that painful result can be attributed to the cold water. The question is, what produced death? The fact is that, generally, the circumstance has happened in this wise: on some hot day—perhaps (as it usually occurs in the summer season) under a broiling sun—some gentlemen have met for the purpose of testing their skill in the game of cricket or boat-racing. Of course each player is highly emulous and ambitious to become the victor; and, consequently, employs all his skill and strength to accomplish that end: he becomes excited, he runs with all his might from wicket to wicket, and in search of the ball:—his heart beats rapidly, and he trembles with eagerness; after having strained every nerve, both mentally and physically, for some hours. The game is won or lost: and exhausted, he throws himself down upon a neighboring bank—calls for a glass of water to quench his thirst, and, his head dropping upon his chest—expires. The poor fellow would have died whether he had taken the glass of water or not. He did not die from the effects of the cold water, but from either excessive exhaustion, from over excitement, or from, literally, a broken heart. We know that horses, during, or immediately after, a race, are killed from

this accident, then why should not human beings be subject to the same misfortune—the conditions are the same both in man and horse—extreme excitement and inordinate muscular action. We have, probably, all heard of cases of sudden death having occurred among Oxford or Cambridge students after having competed in a boat race, and who have not drunk cold water after it. Death happening in this way is very properly said to arise from exhaustion, the result of the boat race; but, had the unfortunate gentleman swallowed a glass of water after the race, of course the untimely death would have been attributed to the rash act of drinking the cold water, instead of the real cause—excitement and exhaustion.

Not a great while since it was thought dangerous in the extreme to *bathe* when the body was at all above the ordinary temperature: and school-boys were forbidden to enter the water in that condition, but were ordered to stand by the brink of the river, till they felt themselves cool, and in that miserable, half-starved, shivering state, they plunged into the stream. This method of taking a bath, is infinitely more injurious than beneficial, for 'tis very frequently followed by an attack of cramp. A man should never take a cold bath unless he feels himself warm, and the hotter he is, *cœteris paribus*, the more useful will the bath become. However, let us rejoice that this manner of bathing is almost entirely obsolete, and I have not a doubt but that, before many years shall have elapsed, the absurd notion that it is injurious to take cold water when the body is heated, will have become equally out of date.

The most remarkable point in connexion with the

above case is the great rapidity with which the fever was conquered and the patient cured. This is a disease of very frequent occurrence among the poorer classes, in which there is a great danger to life, being very commonly fatal;—and in which, when treated allopathically, several weeks are usually requisite (if it should at length terminate successfully) to enable time to eradicate the affection. In the above narrated the child had recovered in eleven days from the commencement of the treatment. It was an urgent case, demanding urgent remedies: such were administered: and, as the sequel showed, with the happiest results. There followed no tediously lingering period of convalescence, which in this disease always occurs under the old system, and which is so much to be feared, as during this time *relapses* not unfrequently take place, and which often prove more dangerous than the former original attack. The reason of this long duration of the convalescent stage is clear as noon-day. It is because the patient, having imbibed so many fever-draughts and cough-mixtures, and having undergone such an amount of blistering, purging, bleeding, leeching, etc., and all these remedies being so weakening in their effect, the constitution is debilitated and impaired to such a degree, that nature requires, *ex necessitate*, a considerable length of time to strengthen and rebuild the body—so broken up by this heroic drug treatment. Again, relapses more commonly occur under allopathy than the water-cure, since, when the system is reduced below par by any means whatsoever, then it is rendered much more liable to the inroads of disease: thus fever, ague, cholera, etc., happen most frequently in the poorer districts,

where the inhabitants, from the effects of impure nourishment, crowded rooms, bad drainage, etc., have become weak, cachectic, and of impoverished blood. Just in the same way, when the constitution has been left in a weakened condition after an attack of any of the exanthemata—in small-pox, boils; in scarlet fever, dropsy; and in measles, pneumonia very frequently supervene. Now, on the other hand, under the hydropathic treatment, the period of convalescence is *shortened*, and this so much so, that, almost *immediately* after the reduction of the fever, the patient has recovered his strength, and is enabled to resume his duties in life, so diminishing the chance of becoming the subject of these dangerous sequelæ.

One of the many advantages that the water-cure possesses over the old system is this—that, while it energetically combats the disease, it, at one and the same time, imparts tone and vigor to the general economy, so guarding against the encroachment of any other affection. This is a virtue to which I believe no method of treatment under heaven, except hydropathy, can lay claim.

In the case of this child, when the symptoms had subsided, with the exception of a wash-down in the morning, which every one who has sufficient stamina ought to take each day of their lives, the treatment was discontinued, and the patient perfectly regained her strength in a few days. If, on the contrary, this had happened in the practice of a physician of the old school, when the disorder had terminated and convalescence commenced, he would then, in medical phraseology, ‘pour in tonics,’ columba, gentian, quassia, etc. But

he orders these when the patient is convalescent; or, in other words, when the disease has taken its departure, and nature is using every means in her power to recover the system from the shock it has so recently undergone. There is not a single tenable argument that can be adduced which will contribute one iota to favor the belief that any of these drugs are *tonic* in their action. But even assuming, for a moment, that gentian is tonic, surely when the malady has left, and the invalid recovering, this is not the period for its administration. 'Tis too late—the proper time has passed away; it should have been given, if at all, when he was becoming weak—not when he was growing well. If it have the power of strengthening the constitution, why not meet the advancing enemy at once, instead of calmly waiting till the patient is cut down? for, certainly, it is much easier to repair a house and stop its decay, than build one up again when broken down and shattered to pieces. The fact is simply this: the orthodox physician exhibits these tonics because he was told to do so by his medical tutor; and, again, *his* medical tutor followed the same practice, because, forsooth, his father did so before him. He shuts his eyes as tightly as possible, and blindly believes that which he is bid, never dreaming for a moment that possibly he may be in error, nor giving himself the slightest trouble to investigate the matter. Happily there are some exceptions to this unwholesome system of working in the dark, and making use of other men's brains instead of our own: and the following is a praiseworthy example of one of the few who have courage to think and act for themselves.

Some two or three years since a fever, of a very severe kind, broke out with great virulence in one of the manufacturing towns of the north of England. A medical man residing there being sceptical and dissatisfied with the ordinary routine of practice, determined upon trying hydropathy. He treated nearly three hundred cases, out of which number only about six died, and these were principally old people and children. These were not selected, but all cases of fever were taken indiscriminately—the mild and severer forms alike. This fact alone is a strong argument in favor of the efficiency of the water-cure in fever.

Dr. Floyer, a gentleman held in high esteem as a medical authority, mentions the following: ‘A Turk, a servant to a gentleman, falling sick of a fever, some one of the tribe of treacle-connors (being called in) whether apothecary or physician I cannot tell; but (according to custom) what between blister and bolus, they soon made him mad’—(delirious in fever.) ‘A countryman of his, that came to visit him, seeing him in that broiling condition, said nothing, but in the night-time, by some confederate help, got him down to the Thames side, and soundly ducked him. The fellow came home sensible, and went to bed, and the next day he was well. This story was attested to me by two or three gentlemen of undoubted worth; and doubt it not, but believe it, from the greater probability; for I hold ten to one on the Thames side, against treacle, snake-root, etc.’

When a man has fallen down and fractured his leg, he is usually placed upon a bed with his leg straightened. After the lapse of a short period, if we look at that part of the limb which has been broken, we shall

observe it to be hot, red, and inflamed—in point of fact, it has caught a fever. The leg consists of bone, muscle, ligament, etc. The common practice to subdue that fever is to apply cold fomentations to the spot. Now, when a man is sick of a common or remittent fever, the same phenomena are observed, the principal difference being, that a more extended surface is affected—namely, the whole body. The leg but forms a part of the whole system, which is made up of precisely the same elements—bone, muscle, ligament, etc.; so that when it (the whole system) is attacked with fever, the same changes and actions are going on as when the leg is inflamed, or feverish; hence, there is a great similarity in the two cases, the great distinction being—degree; in the one a small portion, and in the other a larger amount of tissue being implicated. As the two affections so nearly approach each other in their character and nature, so likewise ought the remedies to resemble each other. In the old practice they are no more alike than chalk and cheese; but in hydropathy—very nearly identical—the inflamed *leg* is cured by a wet bandage—the inflamed *body* by a wet sheet or compress (an enlarged bandage).

It has, moreover, been proved over and over again, by statistics of undoubted veracity, that the mortality is infinitely less when treated by hydropathy than by drugs. Granting, for an instant, that the chances of recovery are equal under both systems, yet still the argument must side with the former method, for, if a patient can be cured by so simple an agent as water, it can, evidently, be but the height of folly to have recourse to medicines, which every child knows do so

much injury where they fail to be productive of benefit. Again, by means of this system we are enabled to accomplish all that the old practitioner pretends to achieve with his drugs. We can reduce the heart's action, lower the pulse; we can act upon the skin, and abstract its heat; subdue the pain, and tranquillise the brain and nervous system which is keeping up the delirium. We can do all this, and that, nevertheless, without the smallest fear (judiciously applied) of injuring the constitution; but this the drugs are utterly incapable of, and thus hydropathy has an undeniable and decided superiority.

One other point and I have done. This case of gastric remittent fever affords us a good illustration of the importance of conforming to an old, but no less truthful adage, of 'a stitch in time saves nine.' The child becomes out of health—the stomach and alimentary canal disordered. This is a very favorable condition for parasitic development—so it proved in this instance; for after a time a parasite appeared in the form of the ascaris. This was suffered to remain in the system so long that, at length, the mucous membrane and nerves were irritated to such an extent, by the presence of the intruder, that another and secondary disease made its appearance—namely epilepsy. Lastly, remittent fever was the consequence. Now, had the mother put her child under the treatment in the first instance, when she was sickly and out of health, none of these severer sympathetic affections would have arisen, nor her infant's life been placed in jeopardy. This procrastination is also particularly observable in cases of chronic disease. It is a dangerous

and often fatal mistake, for there is no difficulty in taking a spade, removing seed recently sown, and casting it to the winds ; but let the same seed remain buried under the earth till it shall have grown into a mighty tree, and shot out its roots and branches far and wide in the neighboring soil : then it becomes surrounded with difficulty, and only to be exterminated by an expenditure of immense labor and perseverance. How common is it for a man to suffer all the premonitory symptoms of a deadly disease, and who, neglecting their timely warning, consoles himself with the idea that it is only a local derangement and will shortly pass away ; when, perhaps, suddenly, but, alas ! too late, a blood vessel bursts, and, as by a flash of lightning, he is struck down by the unrelenting hammer of the giant—apoplexy.

‘In the beginning of fevers *ex pertus loquor*, in many cases I have seen it’ (cold water) ‘to cure and take away much of the febrile heat and thirst at the very first immersion.’

Dr. EDWARD BAYNARD.

Yours sincerely,

W. ALFRED JOHNSON, M.D.

LETTER IV.

Mercurius.

'The science of medicine was founded on conjecture and improved by murder.'

Sir ASTLEY COOPER.

MY DEAR EDITOR,

MR. ——— presented himself for the hydropathic treatment in July, 1853. He was a military man—had seen a great deal of active service abroad, and was, consequently, much exposed to the inclemency of the weather, and subject to a great amount of excitement, both of body and mind. Had suffered from his present illness, more or less, some years, and it was not till he was reduced to his present condition, that he resolved to essay the water-cure, very much contrary to the wishes of all friends and relations, who boisterously declared such a proceeding to be the height of madness, and would, in all probability, end fatally.

He was about fifty years of age, of a small, thin, delicate frame of constitution, five feet six inches in height. He presented a care-worn appearance, with dry, sallow face, and eyes very much tinged with

yellow : extremely wasted and emaciated, weighing but seven stones five pounds. He complained of head-ache, of giddiness, noises and singing in the ears, with a feeling of great congestion, fulness in the head, and sometimes such confusion of ideas that, at times, he scarcely knew what he said. He was troubled with *muscæ volitantes*—specks floating before the eyes, and moving up and down as he elevated or depressed them. He was greatly tormented by indigestion ; appetite bad, and very fastidious ; tongue loaded, furred, covered with prominent papillæ ; breath very offensive ; pain in the chest, with a sensation as if there were present a heavy load, as of lead, weighing and bearing him down ; acid and acrid eructations, all the day through, very much aggravated after meals ; also much distension and uneasiness after having swallowed the least possible quantity of food ; a tympanitic state of stomach. Pain in the abdomen, back, and limbs ; very obstinate constipation. Likewise suffered from cold hands and feet ; indeed, the excessive coldness pervaded the whole frame, with the exception of the head, which was usually burning hot. With all this he was troubled with sleepless nights. The patient's brain would be working without cessation the entire night, and the poor fellow would lie tossing about from one side of the bed to the other, till at length morning broke, and, to a certain extent, put a termination to his night sufferings ; though perhaps these were even surpassed by those he experienced by day. Add to these miseries—though last, not by any means least—extreme *nervousness*, and you will have the list of evils nearly complete. He could not bear to see the slightest society, avoided every one

in his walks, and, whenever able, would endeavor to shun the world by locking himself up in his own room, and would there sit brooding over his misfortunes, till circumstances compelled him to quit it. He, as is the case with most nervous diseases, imagined his own to be one *sui generis*, an affection that never had occurred before, and which was totally without the pale of all remedial measures. So shattered was his nervous system that, even when talking to his own medical attendant, his eyes would become suffused with tears, being quite unequal, however great an effort he made, to restrain them; miserably was he dejected, and full of evil forebodings.

In this unhappy state he commenced the following hydropathic treatment:

	WEIGHT. st. lb. oz.	BEFORE BREAKFAST.	NOON BATH.	AFTERNOON.
July 22	7 6 0	Wash-down.	Towel-pack 40 min.	Drip-sheet.
July 30	7 5 8	Wash-down.	Towel-pack 40 min., followed by shallow bath	Drip
Aug. 6	7 5 4	Shallow Bath.	Towel-pack 40 min.	
Aug. 13	7 9 12	Wash-down.	Towel-pack, 40 min., followed by wash-down	Wash-down.
Aug. 20	7 9 12	Wash-down.	Douche 1 min.	Towel-pk. 40 min.
Aug. 27	7 8 12	Wash-down.	Towel-pack 40 min., and shallow	Sitz-bath 30 min.

Besides this treatment, he wore a large compress around the body—one of the most useful hydropathic appliances we possess. Before he had been many days under this system, he had already felt its beneficial effects, and very shortly his depraved appetite righted

itself, he lost his loathing for plain food, and ate decidedly better. At the same time the distension after meals quickly vanished. In about a fortnight his constipation was completely cured—his head-ache gone. He became more cheerful; his countenance regained, to a great extent, its natural appearance, the yellow and sallow hue disappearing. He was in every respect very much improved.

After the lapse of five weeks, domestic affairs called him suddenly away, much against his own inclination, as he was doing so remarkably well. Before he quitted the water system he had gained a good deal in weight, slept better, constipation completely overcome, dyspepsia very much improved, and he got rid of his pains. His great disease, *nervousness*, was so much benefited that when he left it was scarcely perceptible, and he was able to enter the drawing-room—freely to converse with his friends. In short, when he bade me farewell, he was a ten-fold better man than when I first saw him.

I cannot refrain from here mentioning a little circumstance that occurred in this case, in connexion with homœopathy. Mr. —— had for some little time complained of unusually bad nights, produced, as he imagined, by severe attacks of heartburn. So one day he asked me to prescribe him some homœopathic medicine; he was suffering at the time from one of his attacks, severer than customary, of heartburn, accompanied by great depression of spirits, and a wretched sensation of giddiness and sea-sickness, without the ability of vomiting. I did so; and ordered him three drops of ipecacuanha, to be mixed with twelve tea-spoonfuls of water, one to be taken immediately, and another to follow

each hour, till he felt himself better. Above five minutes after he had taken the first dose, he saw me, and said, 'It's a very extraordinary thing, I don't know whether 'tis the effect of the imagination, or the result of the ipecacuanha, but I certainly never felt so sudden a relief in my life; for since I have taken it, the nausea and giddiness have almost left me.' He continued to take a few more spoonfuls in the evening. When he arose the next morning, he assured me that he had passed a much more comfortable night, and had slept better than he had done for some nights.

REMARKS.

If there be one disease less understood by the faculty than another, that disease is the very frequently occurring one, known by the name of *nervousness*, of which the above was a very excellent example, and in which the patient had been wrongly treated for an ailment of almost each unfortunate organ in his body. Thus, at one time, he was told that the *constipation* was the root of all his misfortunes, and took suitable remedies to remove this. It is true, for the time (a day), this one symptom was removed, but unhappily it stopped here, and accomplished no more; for the patient found himself the next morning as bad as the preceding, and all the other symptoms as severe as before.

At another time the *liver* was declared to be the seat of the malady, and treated accordingly by blue-pill and black-draught night and morning. This treatment appeared but to aggravate the disease. 'Poor, unhappy liver! thy back should be broad, for thou hast to bear

more blame and rougher handling than any other one viscus in the human frame.'

Then, again, his *stomach* was pronounced to be the grand origin of all, and so was subjected to various kinds of stomachics and dinner pills, but with no better success than the former treatments.

In this way the patient continued; first trying one drug and then another, till at length all patience (and his little remaining health) was exhausted, and in despair he forsook them all for hydropathy.

Now, the truth is that neither the bowels, liver, nor stomach was the primary cause of the other ailments, nor should they have been treated as such; the *brain* and *nervous system* were the real and only cause of the disordered liver, dyspepsiæ, etc., and *these* should have been attacked. The great mistake arose in treating the symptoms, and not the disease—in not distinguishing between cause and effect. When the mainspring is broken, you may oil the wheels and cog-wheels till doomsday, but you cannot make the watch go till you shall have repaired the mainspring—the cause of the stoppage. As long as the nerves are out of order, how is it possible for the different organs in the body properly to perform their functions? for when the viscera are deficient in nervous energy they lose their natural stimulus, and become unequal to perform their duty. The rudest acquaintance with anatomy will teach us that there exists an immense sympathy between the brain and all the other viscera: thus, the pneumogastric nerve arises from the brain and passes out of the skull into the neck: thence it proceeds downwards, behind the lungs, to the æsophagus, which

it accompanies to the stomach, and is distributed upon that organ. The pneumogastric gives off a branch called the gastric, which supplies the liver. The spinal cord is a continuation of the brain, and from it are given off the sacral nerves, and these again give visceral branches which supply the alimentary tube. Thus, we at once observe a direct communication between the brain, stomach, liver, and bowels: and we know that where there is continuity of nervous matter between two different organs, there is also a great sympathy between them; and when one is affected the other is likewise liable to become so from this sympathetic action. It requires but very little common observation abundantly to prove this; for instance, let a certain nerve, which is placed in the elbow, be struck, and pain will immediately be felt in the fingers, the nerve running between the joint and digits. Again, in scrofulous ulcerations of the hip-joint the pain is sometimes felt almost entirely in the knee, so that this pain is often the most prominent symptom; and not uncommonly, by the unobservant, this hip disease is overlooked, the pain in the knee being treated as a primary affection. One of the common indications of liver disease is pain in the top of right shoulder, one of the nerves supplying that organ also ascending into the shoulder. A man receiving a blow on the head, producing concussion of the brain, is at once seized with sickness. So, were it needed, I might go on multiplying examples ad infinitum. Thus we see that, should the brain become once affected by disease, each and every organ supplied by it is also liable to take upon itself a morbid action; and every part of the body is more or less connected

with the brain, so that a person suffering from nervousness (a brain disease), may become subjected to almost every kind of pain in any part of the system: thus, pains in the stomach, liver, arms, neck, etc., are all extremely common.

The most healthy stomach can no more digest its food without a due supply of nervous energy than it is capable of doing without a sufficient amount of arterial blood—the one is essential as the other. Now, a certain *temperature* is requisite before the stomach can digest anything, and the heat of the stomach is, to a certain extent, generated by the nervous system, as was proved by Sir Benjamin Brodie, who noticed that when a limb—as arm or leg—is paralysed, the temperature of that arm or leg is, to a sensible degree, lowered. He performed many experiments upon dogs, etc. Cutting down upon and dividing the principal nerve of the leg, he observed that the caloric was very much diminished. He then made a similar wound in the other leg, the same in extent, but just avoided cutting through the nerve. In this limb the temperature remained the same as before the operation; and from experiments of this kind he concludes that animal heat is principally due to the nervous system.

When the temperature of the stomach is below 100° Fah. no concoction can take place; and as this is the natural temperature of the stomach when a person's nervous system is sound, we may fairly conclude that, when the *generator* of heat (the brain and nervous system) is faulty and in diminished force, so also the temperature of the stomach shall be lessened in its intensity. When a patient complains of cold hands,

feet, etc., it is very often erroneously said to depend upon a weak and languid circulation, when it really is due to a diminished supply of nervous energy. From this cause it was that Mr. —— suffered to such an extent from the same unpleasant symptoms.

By taking from the stomach a portion of its gastric juice, putting it into a basin, in which some meat has been placed ; and by keeping up a temperature of 100°, we are enabled to produce a kind of artificial digestion ; but lower that temperature only one degree—99°—and immediately the process ceases ; raise it again to 100°, and it will re-commence to digest the contents of the basin. In this way it is that, when the *brain* is out of proper working order, so also is the *stomach* out of proper working order, and *indigestion* is the *consequence*.

As regards the constipation, there were two causes in operation at the same time to produce it ; in the first place, a deficit of nervous energy, and, secondly, the inactivity of the liver, (also from the brain) ; this organ, being sympathetically disordered, was unfitted for the discharge of its office in separating the bile from the blood ; which, instead of passing on into the duodenum, to act as a secondary stimulus to it, was carried on with the blood into the general circulation—so producing the yellow, sallow appearance of the face and white part of the eyes.

There was only one tissue or organ which, being diseased, could account satisfactorily for the long chain of morbid actions observed in Mr. ——'s case—and that was *the brain* ; and yet, by some strange fatality, this appears to have been overlooked altogether. The

disease was neither liver nor stomach, but *nervousness*. When I say nervousness, I do not employ this term lightly, as is but too often the case with some practitioners, who appear to regard this affection of the nerves as one of mere fancy, and one that simply requires a little energy and exertion on the part of the patient to enable him to throw it off, and rid himself of it entirely. But the truth is that this *nervousness* is as true and genuine a *disease* as *apoplexy* or delirium tremens, and very often infinitely more painful and distressing—only to be cured by the most sedulous and attentive perseverance. It is one of those diseases, like hysteria—which do not present to the dissector's eye any morbid appearance or alteration of structure—not an organic affection, commonly so called, but one in which there seems to be a general relaxation, looseness, or *unstrungness* of the *brain*; and, in consequence, *nervous system*; and whose exciting cause is usually long-continued mental excitement,—and that excitement may be of almost any description, whether it occur in the member of Parliament, whose mind is constantly occupied with parliamentary affairs; or in the lawyer, soldier, physician, or tradesman—in business; and we even not unfrequently observe it in the farmer—but in the latter case, generally, in a much milder form, as here there are many counteracting circumstances which tend to ward off the inroads of the disease, such as constant exposure to the open air, exercise, etc. In fact, whenever the brain has been overworked, we look for and expect to find this affection—*nervousness*—more especially where there has previously existed some predisposition to weakness in that organ. Take,

for instance, a case in point—a very common example. A man with an active, ambitious mind, being left in poorer circumstances, is compelled to push his way in the world. He at once sets his brain thinking of the best means of raising himself from his present position—in other words, to make money—to as large amount, and in as rapid a manner, as possible. He enters upon some kind of business, and from that moment his *brain is never at rest*; he awakens in the morning, *thinking* of his business; during breakfast, the same thought is *still present*. He commences his morning's occupation—busily *working his brain* till dinner. He then snatches a hasty meal, during which the *same idea haunts him*. Again he hastens to the work, keeps closely confined to it till bed time, when he is either kept awake by the excitement of his own imagination (*brain*), or else passes into a restless, fitful, slumber, *still dreaming* of the sole engrossing subject, money-making. Unrefreshed and feverish, he awakes in the morning, and once again plunges into his destructive business. The same thought is *always there—never absent—continually racking his brain*, morning, noon, and night—for EVER.

This state of things may endure for a certain length of time, but eventually, sooner or later, the delicate nervous system gives way, unable longer to bear up against this excessive over-stimulation, and the result is the loss of that health without which the whole world is a nothing. Thus suddenly vanishes from his grasp all prospect of ever attaining that same fortune for the which he has sacrificed so much of his time, labor, and, above all, *health and strength*.

We may compare the brain of a person who indulges in this passion to a bow, which when kept constantly strained and strung, will, after a certain time, become relaxed, and lose its elasticity; so, to carry out the simile, if, after the bow has been strung, and the arrow shot, the string be again slackened for a season (in the case of the brain freed from business), then the cord will remain firm, strong, and well fitted for the discharge of the next arrow.

Mr. ——— complained of head-ache, of giddiness, noises and singing in the ears, with a feeling of congestion, and fulness in the head, and confusion of ideas. These symptoms were clearly referable to *congestion of the brain*. What was the reason of this congestion? *Over excitement of the brain*. Hence there existed *two affections, nervousness, and congestion of brain*: and yet this *congestion* of brain was but a symptom of the disease—*nervousness*—in like manner as jaundice is but a symptom of some disease of the liver. A muscle has a certain function to perform—to contract,—the skin has also a certain function to perform—to secrete the perspiration; the absorbents have a certain function to perform—to take up from the intestines matters from the stomach; the *brain* likewise has certain functions to perform—namely, to think and feel. Whenever a muscle contracts, there is a rush of blood to that muscle; whenever the skin secretes its fluid, there is a rush of blood to it; whenever an absorbent imbibes its fluid, there is a rush of blood to that absorbent. Every pulsation, inspiration, and expiration, is attended by a rush of blood to the organs producing pulsation, inspiration, and expiration. And whenever the *brain thinks*,

there is a rush of blood to the brain ; minute or large, according to the intensity of the emotion ; thus, when a person is thinking deeply and anxiously, he may often perceive a throbbing of the temporal arteries ; a man in warm argument becomes flushed in the face ; a lecturer or orator the same. A student puzzling his brain in the endeavor to solve a difficult problem in mathematics, commonly leaves off, complaining of head-ache. All these phenomena are due to the rush of blood to the head. When any organ is exercised within *reasonable limits*, time is allowed for the escape of the blood brought to it by that exertion, and such exercise is not only harmless but most decidedly beneficial to the organs brought into action ; this moderate exercise is strengthening, witness the legs of opera dancers, and the arm of a blacksmith. But when the brain is *inordinately exercised*, time is *not allowed* for the subsidence of the increased afflux of blood to the part, and the bulk of the brain becomes increased by its presence. Hence we have a constant abnormal quantity of fluid in the blood-vessels, and these, being weakened and debilitated from paucity of nervous energy, soon give way and become dilated, thus accommodating themselves to the unnatural quantity of blood continually pumped into them. And now, being dilated, they are capable of holding more blood—and more blood is continually circulating through them. This is what occurs in those who indulge in more intense or constant intellectual emotion than nature has willed man to do, and this is what did occur in the brain of Mr. —

Well, then, having determined that the foregoing

was a case of *nervousness*, the question—How to cure it? again became paramount. The first important step was the removal of the cause of the affection—mental occupation to a morbid extent, and over excitement of the brain; and the second to treat—not liver, stomach, etc., which were only so many symptoms of the disease—but the *brain and nervous system*—the true fons et origo mali. But how? As there is but one means of strengthening the nerves, viz. by tonics (remedies which increase the tonicity of the animal fibre, imparting to it, when relaxed, the proper degree of tension for the due performance of its functions, thus bracing up and imparting power to the exhausted nerves and system), this was had recourse to.

Now, as it is utterly impossible to prove that such *drugs* as are termed *nervine tonics*, as sulphate of zinc, strychnine, etc., have, when given in the ordinary way, the slightest action whatever upon the nervous system—these were rejected as futile. But, on the other hand, as it can be established beyond the shadow of a doubt, that cold water, properly administered, not only *has* a powerful action upon the nervous system, but also becomes the one most efficient agent in combating nervous affections—this cold water was employed. We have but to observe the phenomena that take place upon the application of cold water to the body to decide this fact: for what is the effect of a cold bath? It acts upon the superficial nerves, so causing a degree of shock, and a sudden reflex action of the respiratory muscles, under which the patient takes a deep respiration, and the lungs become inflated with atmospheric air. If the application of the cold water be continued

a little longer, the skin, nerves, and superficial capillaries become contracted, and a slight degree of determination is produced: but this is quickly followed by a disproportionate degree of reaction and increased capillary circulation, and to a much greater extent if we assist the process by the addition of friction; the whole system is braced up and invigorated by it. Water taken internally performs the same grateful office upon the nerves of the stomach as it does upon the cutaneous nerves when applied externally to the skin, only to a lesser extent. And as I have shown that there is an intimate connexion between these and the larger nerves communicating directly with the brain and nervous system, so also, if we improve the tone, and impart a healthy vigor to the visceral nerves, by the imbibition of cold water, these larger trunks must, in their turn, sympathetically be benefited too. These results were effected by the *general* baths, shallow bath, wash-down, etc.; but the patient likewise used topical applications—sitz, compress, etc. These were not employed so much radically to cure the *diseased brain*, as to remove some of the tormenting symptoms which tended only to aggravate and keep up the affection. For this purpose they proved themselves to be valuable adjuncts in the alleviation of head-ache and other pains. Having, however, already taken up a considerable amount of your space, I feel I ought not further to trespass on you, so shall leave the question of the merits of these baths to another opportunity, that may present itself at some future time. Before concluding, let me bring forward one other argument in favor of the water-cure in cases of *nervousness*, and that by far the

most influential of any that can possibly be adduced, namely, the RESULT.

'The water-cure is a stomachic, since it invariably increases the appetite. It is a local calefacient in the wet sheet covered by a dry one. It is essentially alterative in the continual removal of old matter; its renewal is shown in the maintenance of the same weight.'

Dr. JOHN FORBES.

Yours sincerely,

W. ALFRED JOHNSON, M.D.

LETTER V

Inflammation of the Eye, or Strumous Ophthalmia.

‘In all our cases we did as other practitioners did,—we continued to bleed, and the patients continued to die.’

Dr. MADDEN.

MY DEAR EDITOR,

I forward you this month an exceedingly interesting case of ophthalmia.

A young gentleman, about the age of 14 years, presented himself to undergo the water-cure, on the 4th of August, 1849.

The following is the history of the case: He was a boy of decidedly scrofulous habit, of the *phlegmatic* variety, as was shewn by the thick and muddy skin; dark and coarse hair; hazel eyes and dilated pupil; stunted growth; tumid upper lip and abdomen, etc. He had suffered from bad eyes for a considerable time; had been treated allopathically, without the least benefit or relief to his symptoms. He complained of great intolerance of light (severe pain caused on exposure of the eye to light), the lids spasmodically closed, and the

head turned away obstinately from it, so as to avoid the source of annoyance. When the lids were opened, a profuse discharge of scalding tears escaped from the eyes and poured down the cheek. On examination, the eye exhibited an angry redness and great vascularity, with the formation of a quantity of little pustules on the surface of the conjunctiva (the external membrane of the eye) and specks, which were evidently the result of these; there were observed engorged vessels running from the circumference to the middle of the eye. He also was the subject of sympathetic headache, etc. Was compelled always to wear a large green shade that almost covered the whole face. The treatment ordered was this—

	BEFORE BREAKFAST BATH.	NOON BATH.	AFTERNOON BATH.
Aug. 4	Wash-down.	Head Douche.	Head Douche.
Aug. 11	Wash-down.	Head Douche, followed by wet friction.	Head Douche.
Aug. 18	Pail Douche.	Vapor, followed by Wash-down.	Head Douche.
Aug. 25	Pail Douche.	Ditto.	Head Douche.
Sept. 1	Pail Douche.	Ditto.	Head Douche.
Sept. 8	Pail Douche.	Ditto.	Head Douche.
Sept. 15	Pail Douche.	Ditto.	Head Douche.
Sept. 22	Pail Douche.	Vapor and Plunge.	Head Douche.
Sept. 29	Pail Douche.	Plunge.	Head Douche.
Oct. 6	Pail Douche.	Ditto.	Head Douche.

He continued this treatment till he was completely restored to health, having been cured, not only of the diseased eyes, but also, apparently, the strumous diathesis, or constitution, which was the original cause

of the inflammation. When he arrived, he weighed 5 st. 9 lbs. 4 oz., and when he left off the treatment, 6 st. 13 lbs. 4 oz., making an increase of 1 st. 4 lbs. So much for that case: let it go and plead its own cause.

But I will trouble you with yet another, equally interesting—equally instructive. A poor lad, named Thomas Mills, living at the village of Tanworth, Warwickshire, lately put himself under my care and treatment. Phlegmatic scrofulous disposition; aged fourteen. He likewise suffered from inflammation of the eyes, occurring in a strumous habit. He was accustomed to work in a blacksmith's shop. Some years since, whilst engaged in his work, some red hot pieces of iron, that flew off a shoe while undergoing the process of hammering, entered his eye, lodging between the ball and the mucous membrane of the eyelid. From this painful mishap inflammation ensued. After the occurrence he consulted a doctor (not the parish surgeon), who gave him a lotion, which for the time seemed to be productive of some benefit; nevertheless, since the accident at the forge, his eyes have always been very troublesome, till at length they were again attacked with an inflammation of a very severe character, when he was induced to renounce his old surgeon and consult me. He suffered very much in the same way as in the case detailed above, with this difference, that the eyes were much *more* intensely red and swollen, concomitant fever *greater*, sympathetic pains even still *more* distressing. When first I saw him, as is unfortunately generally the case among the poor, he had bandaged his eyes with a thick handkerchief, over which was placed a

shade of enormous magnitude. People appear to have a wondrous faith in the efficacy of the application of heat in inflammation. The poor fellow's eyes were in all conscience hot enough—they needed not this additional source of irritation. Of course the first thing I ordered was the removal of the handkerchief—a command at first received with great surprise and consternation; reluctantly, however, he complied. I then told him that he might retain the shade for that day, but on no account to put it on after *it* was expired. The other treatment I recommended was the following: To rise at six in the morning—to get warm, by running for half an hour, lightly clothed, and minus the favorite green shade; then to take a *wash-down* for one minute and a half; take exercise after it till he became again warm. In the next place, to bathe the eyes with the coldest procurable spring water, for ten minutes; then to use a cold spring water *compress*, without external covering, for one hour. In the afternoon to employ exercise, wash-down, bathing and *compress*, as before; and in the evening to apply the compress—to remain over the eyes all night. This was continued three days: on the fourth I told him to bathe the eyes every ten minutes during the day. On the sixth day the eyes were cured as regards the intolerance of light, pain, etc., nothing now remaining but a slight degree of congestion. And in about three days more, the boy touched his hat and bade me farewell, rejoicing in as good and sound a pair of eyes as any could boast in the county of Warwick.

REMARKS.

Let me very shortly enumerate a few of the reasons which induced me, in the treatment of this case, to abandon the old system, and in its stead employ hydro-pathy; but before I can be properly understood, it will be necessary briefly to consider the nature of inflammation. There are several theories respecting the proximate cause or essential nature of inflammation; some have attributed it to a viscosity of the blood; others to an error loci; Cullen to spasm of the extreme vessels; Hunter to increased action; Wilson Philip to debility, etc. Where there exist opinions so various, and which differ so widely in their signification, we may fairly assume that but very little is known of the matter; and in the treatment of inflammation had much better disregard these hypotheses, and bring our whole minds to bear upon the *facts* revealed to us, both by the symptoms and appearances in the part affected, as well as by the changes we observe under the microscope. If we irritate and inflame a frog's foot, then regard it through a microscope, we shall notice the following phenomena: in the capillaries and large vessels in their vicinity, the blood flows with preternatural velocity, and there is a more abundant supply of it: in the second stage, the blood stagnates in the focus of inflammation, red globules adhere to each other, and liquor sanguinis or lymph is poured out. In the next place, what are the essential symptoms of inflammation? *Pain, heat, swelling, redness*—‘*rubor et tumor, cum calore et dolore.*’

These are about all the absolute facts with which, in the present state of our physiological

knowledge, we are acquainted. This being the literal state of the case, let us return to our inflammation of the eyes. Here we had all the conditions of acute inflammation—pain, heat, swelling, and redness. Of these the *pain* was due, partly and particularly, to a stretching of the nerves, produced by the abnormal quantity of blood in the vessels; and, secondly, to a disorder of sensation. The *heat* may be partly attributed to the greater afflux of blood, and also, à la Liebig, to the more rapid oxidation and metamorphosis of tissue that is going on in the inflamed part. The *swelling* is caused at first by the presence of an unusually large bulk (blood), but, subsequently to the effusion of blood, lymph, serum, or pus. The *redness* was owing to the abnormal quantity of arterial blood circulating in the inflammatory structure, so that the smallest capillaries became distended, and rendered visible to the naked eye.

In discussing the treatment of strumous ophthalmia, Drutt says: ‘Secondly, the distressing intolerance of light must be relieved. . . . This is sometimes effected by’ (mentioning different methods) then adds, ‘but warm poultices, or decoction of poppies vel anthemid, or exposing the eye to the vapor of warm water, or the vapor of laudanum or spirit of camphor, which may be put into a tea-cup, and held in warm water; or warm lotions of the extract of belladonna, or hyoscyamens, or these extracts smeared on the brow, are of more efficacy.’ ‘Thirdly, if the inside of the lids be turgid, they may be scarified—any large vessels running from the conjunctiva to the cornea may be cut across; and blisters may be applied behind the ears, or to the nape of the neck.

On the perusal of this treatment it will be remarked that the tendency of all the remedies 'to alleviate the excessive intolerance of light,' is, among other things, to produce *heat* in the eye—thus we have warm poultices, warm vapor of water, vapor of camphor, produced by warm water, and warm lotions of the extract of belladonna. Now, as this intolerance of light is but a symptom of the inflammation, the only way of abating it must be in the reduction of the inflammation. But let us think for a moment what we are doing—how endeavoring to subdue the inflammation? Here is an eye suffering under an acute attack of inflammation, and one of whose most prominent and essential symptoms is an abnormal and excessively preternatural development of *heat*. Is it possible that this mode of treatment can be seriously recommended by a man of such high standing in the medical profession as Mr. Drutt? This is indeed homœopathy in its most energetic form. Hahnemann himself never stretched his theory to such an extent. The heat of a burningly inflamed eye can never surely be controlled by the application of more caloric. A burning house cannot be extinguished by heaping upon it a quantity of hot embers. The vessels of the eye are weakened and relaxed; and I imagine that no one will be sufficiently bold as to deny that heat acts especially as a relaxant. A man applies heat to his finger—the part immediately becomes filled with blood, producing an appearance of redness. Look at the sugar-baker or glass-maker—people constantly exposed to the heat of furnaces—in them the vessels of the face are distended and congested. A person troubled with slightly weak eyes may, when in the open air, have

them comparatively in their normal state, but let the same person approach the fire, and immediately his eyes become red, heated, and blood-shotten. What is the cause of this? Simply that, upon the application of heat, it produces a relaxing effect upon the capillaries—these become filled with red blood, which cause the irregularity. Then, if the application of heat upon healthy structures produces so great a disturbance, how much more irritating and powerful an agent must it become when used upon such a delicate organ as the mucous membrane of the eye—thus rendered trebly more sensitive by the presence of the acute inflammation! Let us not, in the nineteenth century, talk of curing inflammation of the eye by warm lotions!

These remarks are only applicable to the employment of HEAT to the eyes in ophthalmia; but orthodox men by no means content themselves with that produced by simple warm water, but rather have recourse to lotions made with strong and poisonous drugs, as belladonna. Now this belladonna is admitted by all to possess powerful relaxing and stimulating properties. As relaxant to the muscular tissues, it is frequently employed to allay spasmodic action, and as a stimulant it is constantly used to excite the nervous system, as in chorea, epilepsy, etc., and this in very small doses, as a sixteenth of a grain. It is likewise extensively given to dilate the pupil. It is said to accomplish this by producing a state of paralysis of certain of the muscles of the eye—when those antagonistic to them contract, so dilating the pupil. Whenever paralysis occurs, then also relaxation takes place: and if belladonna be capable, as it undoubtedly is, of dilating the pupil, by paralyzing

the muscles, then also it must, at one and the same moment, cause relaxation (which always accompanies paralysis) of the coats of the blood vessels, which are so much more delicate than muscular fibre, and which, moreover, lie so much more superficially than it. The capillaries, being relaxed, become distended with more blood: more *heat*, *pain*, *redness*, and *swelling*, are the result; and, instead of diminishing the intolerance of light produced by the inflammation, we are further than ever from that much desired end. If it be a fact that belladonna acts as a stimulant (few doubt it), then still the more unphilosophical does its administration become; for the devoted eye is already inflamed and irritated to an alarming degree, and this can but increase the irritation.

‘Thirdly—if the insides of the lids be turgid they may be scarified, and blisters or tartar emetic ointment may be applied behind the ears, or to the nape of the neck.’ It is true that, when we abstract blood from the turgid vessels, we for a certain time relieve congestion; but this is very transient, since the withdrawal of the vital fluid tends in no-wise to dispel that weakness or debility of the coats of the capillaries, which, according to Wilson Philip and Hastings, is the cause of the disease. This condition still remaining—although we remove the blood from the front part of the eye—the vessels will quickly re-fill from those contiguous ones which are behind the organ, and out of sight. More than this—by the removal of blood in this manner, we set up a more rapid circulation through the part, for (nature abhorring a vacuum) the fluid will rush with increased rapidity in its efforts to fill up the vacancy

—thus effectually affording an additional stimulus that augments the excitement—that keeps up the inflammation.

Blood-letting is recognised by all to be one of our most powerful, certain debilitants, and, ergo, relaxants: then, taking into consideration that, in the treatment of inflammation of the eye, we require *tonic* and not *atonic* (weakening) effect, scarifying can only increase the injury to those animal tissues already in a weakened condition.

As regards the tartar emetic inunction behind the ear, when we consider the anatomical relation of parts, the thickness of the skin of the scalp, the great density of the bones of the skull itself, the toughness of the dura mater, the covering of the brain, the extremely minute size of the vessels running from the skull into the brain, and the very small opening into the orbit from the brain, through which these vessels enter at the back of the globe, I am much inclined to believe that the effect produced by the blister behind the ear would be extremely small: and, even were that action more considerable, it could but, like the abstraction of blood, act as a palliative, and not as a curative measure.

Sometimes, in inflammation of the eye, *calomel*, in the old practice, is exhibited. But *not only* in inflammation of the eye, but in almost every kind of inflammation, this calomel forms, in technical language, the sheet anchor of the medical practitioner.

This mineral is supposed to exert *specific* influence upon the diseased structure, but how no one can tell. *Of course* there are dozens of prettily-fanciful theories

attempting to account for this action, and *of course* all these theories are usually fighting together in the dark.

We will suppose that a few grains of calomel have been sprinkled upon a slice of bread and butter and taken into the mouth. What is the course pursued by that slice of bread and butter, and dose of calomel? We will, briefly as possible, trace its course.

From the mouth it passes onward down to the stomach. Then, after having been subjected to the peculiar churning motion of that organ, travels onwards—and is forced down into the small intestine, called the duodenum. In the duodenum the mass (the slice of *bread* and *butter* having undergone certain modifications) is conveyed along the intestines, and is taken up by the loop-like commencement of the lacteals. It then is absorbed by vessels called vasa inferentia and carried into the mesenteric glands; whence it emerges; and by means of other little tubes called vasa efferentia, is conducted into the receptaculum chyli. It passes up the thoracic duct, and enters the circulation through an opening in the blood-vessel, called the vena inno-menata.

By this time the slice of *bread* and *butter* has undergone *many* changes; but the *calomel* still remains the same. The drug, then, having entered the circulation, mixes with the blood, and with it runs through the whole frame—heart, lungs, etc., and eventually arrives at the diseased structure, and is supposed at once to exert its extraordinary curative powers upon the diseased tissues; but by what magical gift is it enabled to pitch upon the right organ? How happens it that this grain of calomel possesses such wonderful power

of perception as to be able accurately to discriminate between the lungs and the liver? Occasionally the most famous of physicians are at a loss in diagnosis; but the wizard-like calomel *never* errs; it goes right to the mark and effects its object. Is it not strange that, after having gone through so many ins and outs, *passed through* so many organs and different tissues, it should always have the skill justly to appreciate the diseased organ in quest of which it is sent? Yet such is said to be the case.

Is calomel an *active agent*? Yes. Then it must do *good* or *harm*? Yes. It is quite possible for a man to labor under an attack of inflammation of the eyes, and his heart, lungs, liver, kidneys, spleen, etc., remain sound and in a healthy condition. Then if the heart, lungs, liver, kidneys, spleen, etc., are *healthy*, their condition cannot be *improved*; and, therefore, the calomel cannot exert any beneficial action upon them; hence, since calomel is an *active agent*, it *must*, ergo, do *good* or *harm*; and as the heart, lungs, liver, kidneys, spleen, etc., are *incapable* of *improvement* (being in their normal condition), the calomel *MUST* be *prejudicial* to those organs.

Then is it worth while to injure so many different parts of the system to obtain the *very doubtful* good that calomel is presumed (by some) to exert upon the eyes? That it be a *doubtful* good is proved by the fact of so many medical men having discontinued its use almost entirely.

There exists a great variety of opinion respecting the efficacy of almost *every drug*; and calomel forms no exception to the rule. For instance, there is Mr. B. C.,

a celebrated surgeon attached to A—— Hospital, a man of great talent and acquirements; a man who has paid great attention to the disease called syphilis, and who, from being connected with one of the great metropolitan hospitals, has had the opportunity of seeing a large practice, ALWAYS gives calomel to cure it. Mr. S., an *equally* celebrated surgeon, attached to B—— Hospital, a man of *equally* great talent and acquirements, a man who has *equally* paid great attention to the disease called syphilis, and who, from being connected with one of the great metropolitan hospitals, has *equally* had the opportunity of seeing an *equally* large practice, NEVER gives calomel, but always *iodide of potassium* to cure it. Mr. B. C. has *tried* iodide of potassium, and does *not find it answer* so WELL as *calomel*. Mr. S. *has tried* calomel and *does not find it answer* so well as IODIDE of POTASSIUM. Who are we to believe—what practice are we to follow? Must we exhibit *calomel*, according to Mr. B. C. (and run the risk of poisoning our patients); or must we exhibit *iodide of potassium*, according to Mr. S. and run the risk of not curing the patient, according to Mr. B. C.?

To show the danger of administering this calomel, I cannot refrain from mentioning one or two examples, illustrative of its uncertainty of action and deadly nature, even when exhibited in ITS ORDINARY DOSE.

Samuel Cooper, in his Surgical Dictionary, when speaking of calomel, observes that it ‘occasionally attacks the bowels and causes violent purging, even of blood. At other times it is suddenly determined to the mouth, and produces inflammation, ulceration, and an excessive flow of saliva.’

‘Mercury, when it falls on the mouth, produces in many constitutions violent inflammations, which sometimes terminate in mortification.

‘Mercury often produces a disease called Eczema mercuriale.’

Dr. A. T. Thompson, after having prescribed it, adds: ‘Under this treatment the disease generally disappears, but sometimes the morbid symptoms increase under every mode of treatment, and a fatal termination of the disease ensues.’

Dr. Taylor, in his work on Medical Jurisprudence, says: ‘Dr. Christison mentions a case in which two grains of calomel destroyed life by the severe salivation induced, as well as by ulceration of the throat.’

‘Another case was mentioned to me by a pupil in 1839, in which five grains of calomel killed an adult by producing fatal salivation.’

‘In another instance a little girl, aged five, took daily, for three days, three grains of mercury and chalk powder (grey powder): her mouth was severely affected, mortification ensued, and she died in eight days.’

‘In another case, three grains of blue pill given twice a day for three days, making eighteen grains, were ordered for a girl aged nineteen, who complained of a slight pain in the abdomen. Severe salivation supervened, and she died in twelve days.’

So much for calomel: and I sincerely trust that it is at least sufficient to caution people how they employ it.

I was once speaking to a lady of the beneficial effects of cold water in inflammation of the eyes. After I had finished what I had to say, she told me that, in the village where she resided, a kind of epidemic in the

form of eye inflammation had some time since broken out among the inhabitants.

She, being charitably disposed, had prescribed for them. Her treatment consisted in bathing the eyes several times daily with zinc lotion (the old remedy). She declared that her success had been little short of marvellous. Upon inquiry I found that the lotion consisted of a few grains of zinc, immersed in a quantity of cold water. She attributed the cure to the zinc, whereas, of course, in reality it was due to the constant *cold water bathing*.

This puts one very much in mind of the well-known tale, related in the 'Arabian Nights,' of the Eastern Prince, whose physician recommended him to rub into the palm of his hand some simple ointment, and to go *into the fields* and play for some hours on *horseback* with *the bat and ball*. The superstition in this advanced age of civilization is indeed great.

Of all the diseases, the water-cure is perhaps the most beneficial in fevers and inflammations. Here, then, was a case in point—*inflammation* of the eye, in an aggravated form. I fearlessly undertook to cure the malady, and think I may venture to add that my efforts were crowned with the most brilliant success.

Having, to a certain extent, seen the rationale of the *orthodox*, it is but fair that I should devote, also, a few minutes to the consideration of the *heterodox*, or hydropathic treatment. A very few words will suffice to this end.

Then, to recapitulate—the patient's eyes were inflamed—there were present the four essential conditions, constituting *inflammation*—pain, heat, swelling, and redness.

Pain. Will cold water alleviate pain? Most assuredly it will! By accident, a person, while sealing a letter, may let fall upon the back of his hand a portion of the burning fluid: inflammation is immediately induced in the part—the pain extremely acute; and, should no means be resorted to for its removal, will remain for a considerable length of time. But let the patient at once plunge the painful member into a basin of cold water, when he will find that the pain is much diminished. If now he takes his hand out of the pure element, the pain perhaps returns, but with less intensity. After continuing the process a few times, according to the severity of the burn, the pain is entirely subdued—never to return. I must again instance the person with weakened eyes: the sufferer leaves a hot, close, confined room, his eyes burning and painful: he goes out into the cold atmosphere, when, to his infinite delight, the pain, as by a charm, vanishes—only to be renewed when he again approaches the fire. This effect is not due to any specific action of the atmosphere, but only to the application of cold; for if, instead of exposing his eyes to the influence of the atmosphere, he employs *cold water*, the same result will obtain. How often does it happen that severe pains in the head are relieved by a walk or drive in the open air. But what acts still more energetically is the application of ice (sometimes) or cold water to the head. When we ponder on these facts (which might be augmented ad infinitum), we may not unreasonably conclude that cold water possesses *anodyne* properties, and is an alleviator of pain. *And so the pain in the boy's eyes was subdued.*

The second essential symptom of inflammation was

heat. Will cold water abstract heat? Most assuredly it will. It is a common practice among allopaths to employ hydropathy (under a *nom de guerre*) in the treatment of scarlet and other fevers: this, with the avowed object of reducing the heat of the surface, which in this disease is often raised as high as 115° . Again, there is the great cold we all experience during a thaw—but why attempt to prove an undisputed fact? *And so the heat in the boy's eyes was subdued.*

The third essential symptom of inflammation was *swelling*. Will cold water reduce swelling? Most assuredly it will. This swelling is produced by the abnormal quantity of blood in the relaxed vessels. There cannot be a question but that cold water has the virtue of producing a contractile state of the tissues. It is a *tonic* imparting to structures, when relaxed, a state of tonicity—tension of the animal fibre. This is exemplified very clearly, in every-day life, by a very simple fact. A wedding, or other ring, fitting tightly in the summer time, will often fall off the finger on the approach of cold weather. Should a person, all red and glowing—an appearance caused by the unwonted *accumulation* of blood in the capillaries—enter a cold bath, the first effect would be a contraction of these vessels, under which the surface would become of a paler color: this change is due to the *paucity* of blood now contained in the capillaries. Certainly, when the person emerges from the bath, reaction would come on, when the superficial vessels would again become distended; but, in the case of ophthalmia, this reaction is not required, and so, by means of the constant renewal of the cold bandages, this after effect

was guarded against, until, by the repeated application of the water, the vessels had acquired strength to enable them to remain permanently contracted, by the action of their own elastic muscular fibres. If cold water possess this power of contracting and diminishing the calibre of living structures (a proposition maintained by the most sceptical), then, cold water, applied to the eyes in a case of inflammation, must act upon, and compel the engorged vessels to contract, thus expelling their abnormal and preternatural burden. The fluid being absent, the swelling subsides. *And so the swelling in the boy's eyes was subdued.*

The fourth and last essential symptom of inflammation is *redness*. Will cold water remove redness? Most assuredly it will! This unnatural color was owing to the increased afflux of blood, and consequently the presence of an unusually large quantity of coloring matter. The blood was expelled, and of course the coloring matter with it. *And so the PAIN, HEAT, SWELLING, and REDNESS* in the boy's eyes, were each and every one vanquished, overcome, and conquered—by the *water-cure*. All the essential symptoms being dispelled, WHAT REMAINS OF THE INFLAMMATION?

One more word and I have done. Druitt writes: 'This, like other scrofulous diseases, is extremely obstinate'; and Dr. Watson gives utterance to the same opinion, who, when speaking of this affection says, 'it is an obstinate and troublesome one.' I believe in the old school this is scarcely denied; but among hydropaths this doctrine of the tediousness of the cure of strumous ophthalmia is completely ignored, and denied in toto, for it is one of those affections,

which, under the water-cure, do not only prove themselves to be not 'extremely obstinate,' but, on the contrary, usually succumb to its curative influence in a remarkably short space of time, as it proved to be in the foregoing instance of Thomas Mills, who was completely cured in a *few days*. I perfectly agree with those very orthodox medical gentlemen, who assert that strumous ophthalmia is (under their practice) an 'extremely obstinate disease'; but since, when treated by the water system, it is commonly eradicated in one-sixth of the time, I cannot but in justice equally agree with the hydropath, who declares it to be an affection admitting of very speedy cure.

'The reaction which follows the judicious use of cold, as a therapeutic agent, may prove serviceable not only in resisting the operation of cold, but also to remove congestions and other irregularities in the circulation from other causes, and to excite in the capillaries and secernents new actions which may supersede those of disease. It is thus that the water-cure of Priessnitz chiefly operates; and, although too powerful an agent to be entrusted to unskilful or unscientific hands, it promises to become a valuable addition to the means of combating diseases—particularly of a chronic kind.'

Dr. C. J. B. WILLIAMS.

Yours sincerely,

W. ALFRED JOHNSON, M.D.

LETTER VI.

Inflammation of the Lungs.

‘There has been a great increase of medical men of late years, but upon my life diseases have increased in proportion.’

ABERNETHY.

MY DEAR EDITOR,

One cold frosty morning, after a severe and heavy fall of snow, with which the ground was covered to a considerable extent, S—— S——, a poor working lad residing in Worcestershire, left his mother's cottage for the discharge of his daily duty as a baker's errand boy. Passing heedlessly along the way, he unfortunately mistook the path, and fell headlong into a ditch, which, being filled with snow to the depth of several feet, completely buried him up to the chin. In this plight he ineffectually struggled to release himself. Timely assistance, however, arriving, he was at length extricated from his perilous position, but not until he had become thoroughly cold and chilled to the bone. Having somewhat recovered from the immediate ill effects of the excessive cold, he fearlessly pursued his

route to his employer's house. Shortly after his arrival he felt himself poorly, but did not complain, and continued his work till evening, when he went home. The next morning he found himself decidedly unwell, but being in humble circumstances, and not possessed of a superabundance of cash, he, disregarding his health, went as usual to his employment. Chancing to arrive a little later than was his custom, his harsh master upbraided him with what he termed his want of punctuality, and as a punishment sent him to his work without allowing him to partake of any breakfast. The poor boy, as well as he was able, being ill and fasting, commenced his business, and painfully exerted himself till two o'clock in the afternoon, when, finding himself thoroughly incapacitated and unequal to the task, he left his work, and slowly toiled his way homewards. Having regained his mother's roof, he was at once put to bed. The medical gentleman of the village was called in. He prescribed some ordinary medicine for the lad, and without the slightest benefit whatever, for the boy became worse. He *blistered* him on both sides of the chest, and he *leeches* him on both sides of the chest—both equally unavailing—and the youth still continued to grow worse. He was put upon low diet. Having faithfully and without a murmur submitted to this treatment for more than *seven weeks*, and the patient daily becoming weaker and more weak, his pains and sufferings still steadily increasing, the mother naturally grew exceedingly alarmed for the life of her child.

The patient himself participated in her anxiety, for one night, suffering more intensely than usual, he exclaimed: 'Mother, if you do not send for another

doctor, I am sure I shall die before the morning.' The maternal heart was touched, and, in her anguish, she having lost confidence in the system the medical attendant was pursuing, determined to abandon the drug treatment, and as a last resource to give hydro-pathy a trial. She did so.

Immediately before the hydropathic measures were commenced, the patient was suffering from the following symptoms of pleuro-pneumonia, or inflammation of the lungs, and their investing membrane the pleura : a sharp, acute, stabbing pain, very much increased on respiration, which compelled him to employ a kind of short constrained breathing. This pain was situated under the left breast. There was the *pleuritic râle* : small crepitation, bronchial breathing and voice, etc., in fact the stethoscopic indications showed it to be a case of inflammation of the lungs. Percussion was dull ; difficult respiration ; the pulse small, weak, and thready ; fever ; hot, pungent skin ; coated tongue, much thirst, great head-ache, and delirium ; with this also extreme emaciation, no sleep at night, and excessive debility : so much so, that the patient could not in the least support himself when he attempted to sit up in the bed to be examined ; and, when supported entirely by others, the pain he endured was agony.

Of course, on entering the room where the patient lay, I, as is the custom of the poor in all cases of sickness, found the apartment extremely close and confined : the window was ordered to be thrown open. The following hydropathic treatment was adopted. The chest was to be rubbed gently, so as not to increase the pain, with the hand, it previously having been dipped into

cold water: this was continued for a few seconds until the hand had become warm, then again placed in the cold water and the friction resumed. This process of alternately wetting and gently rubbing was kept up for half an hour. Immediately after the friction a cold water compress was applied upon and all over the anterior and posterior surfaces of the chest. This compress remained upon the thorax for two hours, when the friction was again renewed—this once more followed by the compress for two hours. The friction and compress were both repeated a third time, so that the friction was employed for one hour and half, and the boy wore the compress for six hours during the first night of the hydropathic treatment.

He had after these applications slept for a short time, and awoke much refreshed. A full solid diet was recommended. The same treatment was persevered in during the whole of the next day, and when I visited him on the second morning, to my great satisfaction I found that the patient had passed a most excellent night, and was a changed and completely altered boy. He could now (still with difficulty) sit up in bed: his face was calm and placid; his thoughts and ideas perfectly collected and rational; he talked sensibly and well, declaring himself, with great apparent delight, to be in but very little pain, indeed scarcely perceptible. The pungent heat of skin was, to an important extent, removed; the fever greatly reduced; the auscultatory symptoms much decreased in severity: the patient was out of danger, on the high road to convalescence. He had eaten a mutton chop on the preceding day.

Seeing that the boy was now so much stronger, and

being now able to bear the *pack*, he was packed, not in the sheet, for that was not conveniently to be obtained, but a substitute was found in the shape of towels, three being placed end-wise one to the other: this was employed for ten minutes, *three times a day*.

The following (third) morning, the treatment was continued. On the fourth morning I again visited him, and in spite of its being a most heavenly day, and the bright and cheering rays of the sun streaming into the room, I found the window again fast closed, thus ungratefully attempting their exclusion—so difficult is it to wean people from their deeply rooted prejudice, even against one of the greatest of God's blessings, and one of the most useful auxiliaries in the cure of disease, *a pure atmosphere*. I need scarcely say that I instantly opened it, and repeated my injunctions to allow it to remain so during the rest of the day. On this, the fourth day, I found the patient in a most promising state, the lungs having nearly entirely lost their inflammation, the patient hungry as a hunter (or hydropathic patient), lustily calling out for more food. Let him have more. There being still present a reliqua of the thoracic affection, the treatment was continued also that day.

I again saw him on the fifth day, when the mother told me that her boy was *up and well*. It was true; he *was* up and well, with the exception of the remaining weakness that is always consequent upon so prolonged and severe a disease, and especially when treated as this poor lad had been before he had courage to try the water-cure. I stopt the wet sheet packing, and ordered him, as a mild convalescent tonic, to have a wash-down twice during the day.

It was now no longer necessary for me to attend him. I saw him for the last time.

REMARKS.

Here was a boy whose lungs, from exposure, became the seat of inflammation. A medical man of the old school was consulted: he treated him for more than *seven weeks*, during which course of treatment the disorder grew daily worse. The boy is dying, when hydropathy is tried, and this with so good an effect that on the first night of its application *he sleeps*—on the second has regained his appetite sufficiently to allow him to eat a mutton chop—and on the third day is pronounced *out of danger*. On the fifth he is *well*, except a little necessary weakness.

On a consideration of the case it appears to me to be one of the most successful on record. An inflammation of the lungs, cured in *four days*, appears at first sight incredible, yet, notwithstanding, such is literally the fact, and, moreover, that inflammation of the lungs not of the ordinary kind, but one of the most dangerous description—since it seems pretty well established that cases of pneumonia with pleurisy, combined and complicated with delirium, are nearly always fatal. What says Dr. Watson? ‘Delirium is a symptom that frequently occurs in the course of an attack of pneumonia, and a very ugly symptom it is.’

According to Andral, the average duration of pneumonia is ten days, when taken in hand at the first onset of the attack. But here we must notice that the affection had lasted *seven weeks* before the hydropathic

appliances were employed. The sufferer had been treated *seven weeks* by drugs, etc., and more—he was considered to be *dying* before the water system was had recourse to. These circumstances were very much against a successful issue; certainly the danger was materially augmented. Yet I did not despair, for such is the usual lot of the hydropathic physician—he is seldom called in before the patient is considered past recovery, and all hope of benefit from any other method of treatment has been relinquished. In spite of these drawbacks the case was undertaken, and, as the result showed, *cured in four days*, considerably less than *half* the time that Andral—the generally considered best authority—requires to cure his patients. This fact alone is a most encouraging one to strengthen the cause of hydropathy.

The French, in surgical language, make use of the term '*heroic treatment*,' signifying a reckless, hit or miss, wild kind of treatment, that they appear to have established in that most careless country; and when we hear of cases of inflammation of the lungs being treated by drugs, leeching, blistering, etc., as in the instance described above, then to our shame must it be confessed that this rash, devil-may-care, '*heroic treatment*,' is not confined to our volatile continental neighbors, but has also found some admirers amongst our own enlightened practitioners. What could be more unreasonable than the conduct of the medical gentleman who first attended this poor boy? He was called in to the case: he saw the patient and prescribed him some medicine. The boy remained in *statu quo*—the medical attendant continued his drugs. The lad grew worse—the medical

man still adhered to his treatment of drugging. The inflammation becoming more aggravated, the more aggravatingly does he follow up the system, until, at length, by his blindly '*heroic treatment*,' the patient is brought to the brink of the grave. By what crooked logic he was induced to continue this monstrously irrational treatment one is at a loss to conceive. By what right did he doggedly maintain the same course of practice, when the unhappy lad was, day by day, before his own dimmed eyes, growing steadily weaker and weaker; the pulse smaller and smaller; and the brain becoming more and more enfeebled? Had his own cerebrum contained one atom of common sense, would he not rather have ascribed this gradual process of dissolution to his own want of judgment in the treatment of the case, and at once endeavored to make amends, by instantly changing his system of treatment? Have we other means of determining the efficiency of any method of cure than by their effect? No. Then what was the effect of these allopathic measures? Bad to the last degree; for, not only did they fail to accomplish that for which they were administered, but rapidly reduced the patient to the verge of the grave. Had the system pursued *appeared* to be productive of benefit in any one way, there would have been some excuse for persevering in its use; but when every symptom is palpably and swiftly aggravated, there can be no reason for its continuance, and the man who does so is most assuredly to be censured.

We can only know the value of the treatment by the result produced, and if that result prove unsatisfactory, then, surely, it is time to have recourse to some other

treatment. If a person have swallowed some deleterious poison, and by the exhibition of stimulating emetics we are unable to evacuate the contents of the stomach, of what avail spending our strength upon a fruitless effort, in the mean time that the insidious poison is being gradually absorbed into the system, and producing its deadly effects upon the blood? Would it not be more consistent with reason to abandon the emetics, and strive to expel the obnoxious matter by means of the stomach pump? But thus it has always been in the old system of medicine; its followers have for ever disregarded the evidence of their own eyes, and, although they observe that their remedies arrest not the progress of the affection, they, still vain of their own consistency, go on, regardless of the consequences, till, at length, death itself snatches the victim from the (unwittingly) destroyer's hands.

When I visited the patient I found, as I usually do, the window carefully closed; and the consequence was, the room being small and low, and the boy not having quitted his bed for some time, the ventilation of the apartment was sadly interfered with, and the atmosphere that the patient breathed none of the sweetest.

People little know the importance of pure and fresh air in the management of disease. Few things act so prejudicially against the cure of disease as the invalid being surrounded by an impure atmosphere. And not only is it injurious to the patient himself, but also to the nurses and attendants. Each time a person inspires, he takes into the lungs a quantity of air, consisting of oxygen and nitrogen, a very small proportion of ammonia, and likewise a slight quantity, 1 in 2,000, of

carbonic acid. After this atmosphere has reached the lungs and again expired, a chemical decomposition or change having taken place in its composition, it is found to have acquired a much larger proportion of carbonic acid than before respiration. This is one of the most poisonous gases in existence: witness the Grotto del Cane and the malignant poisoned valley of Java. Now, in the natural course of events, this gas exhaled from the lungs is intimately mixed up and thoroughly diluted with the pure and fresh air, and its deleterious qualities so much diminished thereby as to be rendered inert; but when, by closing the shutters and tightly shutting the windows, it be allowed to accumulate in a small room, all admixture and dilution with the uncontaminated atmosphere is forbidden; and this gas, being concentrated, becomes extremely hurtful to the living frame, for the patient is not only debarred from breathing the pure element in its natural free state, but also is compelled to respire an atmosphere poisoned by the exhalation of carbonic acid from his own lungs. It, to a smaller degree, is imitating the example of those monomaniacs of France, who, striving to put an end to their existence, burn charcoal; and then, excluding the atmosphere, sit down to await the approach of death. The carbon of the charcoal eats away and consumes all the oxygen of the air, and gradually becomes converted into carbonic acid, which, accumulating in the apartment, finally enters the lungs: thence passes on into the blood, thus producing a sedative and poisonous effect upon the vital principle, which destroys life by producing asphyxia. In the same way (of course to a less extent) do these injurious changes occur in the ill

ventilated apartment of the invalid ; the lungs, acting as the charcoal, abstracts the oxygen from the atmosphere and emits carbonic acid, which, every facility being afforded for its accumulation by shutting up the doors and windows, cannot escape, and thus the air becomes surcharged with this noxious gas, and this, being again inhaled by the patient, produces so injurious an effect upon the system. In the old coaching days, and even now on the continent, how common is it for those travelling, especially if of a delicate habit, to feel, should the windows be all shut, faint and unwell. This is a consequence effected by the absence of oxygen and the superabundance of carbonic acid evolved from the lungs during respiration. Let the windows be thrown open, and the pure air of heaven being admitted, the sensation of faintness begins gradually to subside ; now the carbonic acid becomes freely mixed with the atmosphere, and once again becomes harmless.

The importance of fresh air is likewise particularly observable in the prevention of contagion. Thus, fever is said to be infectious ; *it is* infectious, and *it is not*—according to the condition of the ventilation of the sick chamber. If a man in bed with a fever be lightly clothed and placed in a large airy apartment, and one in which the doors and windows remain patent, and through which there is a current of fresh air, and when the patient be not surrounded with a large multitude of anxious friends (which but too frequently happens), then fever *is not* contagious ; but if, on the contrary, as was the custom not many years since, the door and window be closed, the blinds down, the shutters carefully shut, and the patient smothered with

bed clothes, with a hot fire in the room ; then I say that fever *is* infectious. In the former case a friend may be permitted to visit the invalid without danger, but in the fever hospital of London there is not a physician or nurse who has not caught the disease. From the fact of so many sick persons being crowded together, a proper ventilation of pure air cannot be maintained to distribute the contagious particles ; so that these become concentrated to such an extent that no one can possibly hope, under the present regulations, to be connected with that institution without also the danger of becoming the subject of the affection.

So likewise in a case of inflammation of the lungs—should the apartment be not properly ventilated the attendant of the sick person is liable to grow unwell. Then if a *healthy person* be liable to infection from breathing this polluted atmosphere, surely the patient himself, being already knocked down by disease, and his system debilitated from the prior affection, and from these causes his delicate frame being reduced to a condition so favorable to the ingress of disease—surely, I say, he cannot respire this poisoned atmosphere but with the most injurious consequences, not only in being rendered subject to the encroachment of a new and fresh disorder, but also in retarding the progress of the cure of the old and original malady—whether that malady be inflammation of the lungs, as in the case related above, or any other affection whatsoever.

Not only has the world an antipathy to the inhalation of fresh air when lying on a bed of sickness, but also has the same dread in a state of health ; and, acting in accordance with this antipathy, endeavors to prevent it

as much as possible, and by every feasible means, from coming in contact with the body, treating the atmosphere as a poison, and shunning it as some unwholesome deleterious compound to be avoided at all hazards.

God made the atmosphere and made man to live in it. Were it otherwise than beneficial it would have been otherwise constituted. It would appear that the inhabitants of England do not agree to this proposition, as they allow but the smallest convenient proportion of the frame to come near to it. I allude to the present unthinking practice of heavy and tight clothing, and more particularly to the custom of wearing thick *flannel waistcoats* and other under garments. Many, very many, persons envelope their bodies, from head to foot, in flannels,—flannel waistcoat reaching half way down the body, and with long sleeves only terminating at the hands; flannel drawers reaching down to the ancles; and, in addition, thick stockings reaching up to the middle of the thighs. All these encumbrances generally fit tightly to the skin. This state of things is injurious in many ways. In the first place, it renders the whole system weak and debilitated by the unnatural heat produced. Not only are these under clothings worn in winter, but also in but too many instances during the summer. As a rule, people, especially of a delicate habit, are far more ailing and weakly in hot weather than in cool. Yet, knowing this to be so, they thoughtlessly increase this heat, the cause of their debility, by wrapping themselves up and keeping in the caloric by their under dress. In temperate weather it is advisable to keep the whole

surface, as much as is possible, of the same degree of temperature as the atmosphere itself. By the use of much clothing, the entire surface, with the exception of the face and hands, is kept many degrees above the temperature of the atmosphere. To wear drawers or under waistcoats in warm weather is more unreasonable than it is for a man, who does not wear them, to put on a great coat during the same season; for the great coat, fitting more loosely, would admit of the encroachment of more air under it. Every one will admit that a cool atmosphere is more bracing to the skin than a heated one; yet, if one will take the trouble to place a thermometer upon their stomach, under the flannel waistcoat, they will find that the temperature of the skin is always excessively high—always higher than naturally it should be.

In the second place: under flannel clothing is injurious in preventing the escape of poisonous gases. One function of the skin is to eliminate carbonic acid from the system. The skin contains many thousand tubes and canals, which, put together, would, it is calculated, reach some twenty-six miles. Through these tubes the poisonous gases escape. The flannel usually fits closely and tightly upon the skin, thus to a certain extent blocking up these minute channels, and tending to forbid the outpouring of these gases. The skin of a person lightly dressed, and with which the atmosphere is allowed to come in contact, is cleansed of these gases—and is perfectly sweet to the olfactory nerves. The skin of a person encased in flannel, and with which the atmosphere is *not* allowed to come in contact, is *not* cleansed of these gases, and is *anything but* sweet to the olfactory

nerves—when the flannel is removed. In fact, a man so wrapped up is constantly living in a carbonic acid bath of his own creating. This continual application of carbonic acid to the surface is detrimental to health. As the skin has the power of eliminating, so it has the power of absorbing. A common method of producing salivation is the rubbing of mercury into the skin (as on the thigh or arm) two or three times a-day. If it be capable of taking up mercury and many other drugs, why should it not be enabled to absorb its own gases, which always remain in immediate contact, and which are prevented from escaping by the elastic and closely-fitting flannel?

In the third place: the habitual use of flannel clothing is deleterious, since it renders those who indulge in it very liable to the inroads of disease, and especially coughs, colds, influenzas, inflammation, etc. The action of flannel waistcoats and drawers is to make the skin hot, to prevent the escape of injurious gases, and to confine the perspiration. These matters together operate injuriously upon the healthy skin, tending to produce a disease of that structure, so that the tone of the skin is lost, and the skin itself becomes weak, delicate, sickly, and sensitive; like that of the horse confined in a hot stable, smooth, silky, and glossy; but also infinitely more liable to disease. What occurs to the man wearing none of these unwholesome and heating flannels? The air enters the loose folds of the linen garments, readily finds the skin, freely plays upon it, keeps it cool, dilutes and carries away the noxious gases, strengthening and bracing up the tissue itself. If the cuticle of the man of flannel happen, from some unwonted cause, to be

subjected to adverse weather, that man catches cold; his delicately sensitive skin cannot withstand the shock. But should he who clothes lightly and loosely, become exposed to inclement colds, or winds, or rains, he takes no harm; since his skin is accustomed to every variety of season—is hardened, and in a healthy condition. The surface of the former individual may be compared to a tender hot-house plant, which cannot withstand the merest September frost—whereas that of the latter more nearly approaches to the hardy perennial, which defies all weathers, let it hail, blow, snow, or rain. In like manner as those who muffle up their chins in thick comforters, and heads in warm caps, are more liable to take cold in the head than those who more freely expose these parts to the influence of the atmosphere—are those persons more likely to catch cold in the chest who wear flannel waistcoats. Blue-coat boys seldom or never are seized with colds in the head; and why? the answer is palpable. I know a young gentleman of Nottingham, who, till within the last few months, when he took the water-cure, was in the constant habit of wearing a heavy roll of flannel tied round his neck, thick as a linseed-meal poultice. He was very subject to sore throat, and relaxed tonsils. Since he left it off, he has been only once troubled with this affection, and that shortly after discarding it. It was trifling in its nature, rapidly left him, and he has been free up to this time. The laboring man, whose shirt-front is open, and chest exposed half-naked to the breeze, rarely complains of coughs, or catches a cold. The well-nursed gentleman who rolls in great-coats and comforters, and who dreads the slightest puff of air, seldom passes a

winter without being the subject of a dozen catarrhs or influenzas.

After this long wandering, we will return to the case under discussion.

Another fallacy in the treatment of the above was the withdrawal of food, by putting the patient upon spare diet—in keeping the boy too low. In the ordinary routine of the old practice, this plan of putting the invalid upon low diet (when he is attacked with anything approaching to a severe illness), is almost universal. Of course there are cases in which it is perfectly justifiable and proper; as, for instance, when the patient cannot eat it is the height of folly to attempt to force him to do so, for, had food been wholesome for him at such a period, *nature* would, undoubtedly, have induced an appetite, just as she produces thirst in fevers, when the imbibition of cold water becomes a very valuable curative agent in reducing the fever. Yet, still, as a rule, when the patient is able to eat, his hunger should be satisfied, and food prescribed. It acts very beneficially in keeping up the strength of the system, to enable it to bear up against the disease. The tendency of every disorder is to produce weakness, and a reducing effect upon the economy: and when we withhold food we but add fuel to the fire—we but reduce and weaken the patient the more; and, instead of imparting vigor to the constitution, to allow it to resist the debilitating effects of the disease, we favor the exhausting influences of the disorder, so lending a helping hand to the malady itself in hastening the inroads of that debility, the supervention of which is so much to be feared. Besides

which, there is a good and substantial physiological reason why food, where it is possible, should be administered. When there exists inflammation in any structure, if the inflammation run on to any considerable extent, that structure becomes altered as to its formation or texture: either a deposit takes place, causing thickening, or it becomes softened, or its secretion deranged. In inflammation of the lungs, they, from open cells, containing air, become firm and solid—an appearance produced by an abnormal deposit of a quantity of small granulations, poured out from the surface of the mucous membrane, so filling them up and preventing the passage of the air through them. Then what we have to do in attempting to cure the disease is, first, to subdue the inflammatory action, and, secondly, cause the absorption of these granulations, thus allowing the oxygen again to permeate the air cells. This absorption of the morbid products of the inflammation can only be accomplished by the more rapid metamorphosis of tissue. The whole economy is continually being wasted and renewed—one part burnt up, to be replaced by a new deposit. This change of structure is produced by the agency of the blood, and by the exhibition of a good and nutritious diet (in an anemic condition—the consequence of the inflammation) we rapidly increase its quantity, which, circulating with a strengthened velocity through the system, and being more abundant, produces the desired end. The metamorphosis of tissue is more quickly effected; the *unhealthy* products of inflammation in the lungs are absorbed, and the blood rapidly becomes converted into albumen—then into fibrine, and lastly into healthy

solid particles, which are deposited in the lungs: thus the *abnormal unhealthy portion* is taken up and carried away, whilst its place is filled up by the new and *healthy tissue*: and so the lungs (the inflammation also being removed) once again become sound, and in a fit condition to carry on the proper aeration of the blood.

In the hydropathic treatment of the above, the patient was first rubbed with the moistened hand—then wore the compress—after which he was packed, and, lastly, employed the wash-down.

The application of the wet friction was used, in the first place, because, the boy being weak and feeble, there should not be too sudden a shock to the nervous and vascular systems, which might have resulted, had a large body of water been employed. It was accompanied by friction to prevent the chest from becoming too intensely chilled, the patient being so prostrated as to preclude all possibility of after reaction. The compress followed, acting directly upon the inflamed organ. The combined actions of the friction and compress were anodyne, anti-inflammatory, and febrifuge: the boy slept, and the temperature of the skin subsided.

The wet sheet packing was next had recourse to. This—the hydropathic sheet-anchor—possesses, among other virtues, a sedative action and anodyne effect. It is also antiphlogistic. As soon as its application was safe, this powerful agent was brought into play. A sedative action is one that causes the heart to beat less rapidly than before its use. Allopaths in inflammation employ calomel, tartar emetic, blood-letting, etc., and this with the one sole object of lowering the pulse.

We use the *wet sheet* to produce this effect : but at the same time the wet sheet does much more than this, for it relieves the pain, etc. (as in the case narrated). On the other hand, calomel, blood-letting, and tartar emetic, will also accomplish much more than reduce the heart's action ; for it will render the patient weak as a rat, make him as pale as a ghost, and sick as a dog ; it will abstract a large quantity of the stream of life, and that portion of the blood which remains, will be abused and poisoned by the drugs. The wet sheet will reduce the pulse as speedily, and far more efficaciously than blood-letting. It can be made to reduce the pulsations of the heart twenty-two beats in less than one minute (vide 'Researches into the Effects of Cold Water') after its application : but here no withdrawal of the vital fluid, no sickness, no fainting, no pallor of the countenance.

The heart's action, then, having been restrained, and pumping its blood less rapidly through the capillaries, the heat of skin was also reduced : what remained was carried off by the immediate contact of the water.

The last bath employed was the *wash-down*. This is a very useful bath, whose effects are mildly stimulant and tonic. In this case it was ordered as a gentle tonic to brace up the relaxed tissues generally, after having been so much weakened by the debilitating effects of the inflammation. It was, in point of fact, used just with the same intention that allopaths order their quinine, gentian, serpentary, etc.—as tonics in cases of convalescence after various diseases.

The combined actions of all the baths were *anti-inflammatory* and *fever-reducing*.

In all acute affections of any of the vital organs, as

liver, heart, lungs, etc., there is always set up, besides the disease, *inflammation*, a secondary, or what is called *inflammatory fever*, with rapid pulse, hot skin, furred tongue, etc. So it was in the instance I have narrated to you: besides the inflammation of the lungs there was also inflammatory fever. In truth, there were again present, virtually, two diseases—inflammation and *fever*.

It is true that this fever was only caused by the irritation set up by the disorder in the chest, not the primary affection, but again secondary or symptomatic; and if that inflammation had been cut short at the onset, the concomitant fever would have of itself abated, but where this sympathetic fever has subsisted a considerable length of time, it becomes in itself an important and dangerous disease, and, when there is a fatal termination, pneumonia not unfrequently destroys life by the severity of this fever alone.

This then being the case, could we but find a remedy that was able, at the same time that it arrested the inflammation, also to check the accompanying fever, it would certainly be one of the greatest discoveries in the treatment of disease; since hitherto no method of cure (except one) has been found that is capable of performing this double office. There is but one system that can accomplish this, and that system is the hydropathic. That it will reduce fever allopaths themselves acknowledge in their books on the practice of physic: albeit they do not practise it, but rather incline to the clergyman who once said: ‘Do as I say—not as I do.’ Admitting, as they do, that the application of cold water in scarlet fever be beneficial, why not adopt it in

pneumonia? The fever in all the leading symptoms is the same—thirst, dry tongue, heat of the skin, etc.

But the answer is that in pneumonia there is inflammation of the lungs, and the application of water would be dangerous. Why so? In inflammation of the head, orthodoxy says, apply cold lotions to the head: in erysipelas, use cold applications to the inflamed part: and in inflammation of a limb, after the bone has been fractured, put on cold water dressings. Then, if we are allowed the use of cold water in all these inflammations, why should we not be allowed to apply it in inflammation of the lungs? The inflammation is the same, whether it occur in the brain or chest—the predominant symptom, fever—and the principal object, its reduction. In encephalitis there is congestion and inflammation of the brain: in scarlet fever there is congestion and inflammation of the skin: and in pneumonia, congestion and inflammation of the lungs. If it be right and legitimate practice to employ cold water in the reduction of inflammation, when situated in the brain and skin, so also must it be right and judicious practice to use the same agent in inflammation of the lungs in pneumonia: and the day is not far distant when this will be universally recognised—and, what is far better than this, universally practised.

I will conclude my letter by showing, by statistics of the most undoubted veracity, the vicious and fatal nature of the allopathic treatment of pneumonia. Dr. Routh, in his book entitled 'Fallacies of Homœopathy,' makes the following statement: 'Dr. Dietl, the allopathic physician of the Wieden Hospital, in Vienna, anxious to test the efficacy of dietetic regimen in pneumonia,

instituted a series of experiments. In the course of three years that gentleman treated 380 cases of pneumonia. Eighty-five of these cases were treated by repeated bleedings: of this number 17 died, or 20 per cent.: the remaining 68 recovered. One hundred and six were treated with tartar emetic: the mortality was now 20·7 per cent., 22 dying and only 84 recovering. The remaining 189 were treated by simple dietetic means: the deaths amounted to 14, only 4 per cent., 175 recovering. The above data have been given upon the evidence of Dr. Roth ("Hom. Times," No. 49), an eminent homœopathic writer.'

This is an argument at once fatal, showing, as it most convincingly does, the effects arising from the old method of allopathy in pneumonic affections, for from these statistical accounts it appears that, when pneumonia was treated allopathically, by repeated bleedings, 20 in every hundred died; but when left to nature and diet, only 7 were lost in every hundred.

Nature and the 'medicine expectante' of the French will do more than drugs; but nature combined with hydropathy will do more than either.

'The now fashionable system of hydropathy furnishes strong and extensive evidence of a like kind; although on somewhat different grounds. This mode of treating diseases is unquestionably far from inert, and most opposed to the cure of disease by the undisturbed processes of nature. It, in fact, perhaps affords the very best evidence we possess of the curative powers of art, and is unquestionably, when rationally regulated, a most effective mode of treatment in many diseases.'

Dr. FORBES.

Yours sincerely,

W. ALFRED JOHNSON, M. D.

LETTER VII

Rheumatic Gout.

‘Medical doctrines are little better than stark, staring absurdities.’
Dr. GREGORY.

IN the early part of December, 1854, Mr. Joshua H. Small, of Market Place, Boston, Lincolnshire, mustered sufficient courage to try the virtues of the water-cure. He was a tall, broad-chested, well-made man, thirty-two years of age. He had been subjected to attacks of rheumatism from his youth. At the early age of sixteen, he first experienced the miseries of this painful disease. For the heads of the case, I will refer you to Mr. Small's own words, embodied in a letter that I have since received from him. He is a great friend to the cause of hydropathy; and trusting that, by his case being made public, it may be the instrument of inducing others, similarly afflicted, to essay the merits of hydropathy, he has expressed a wish to have it published.

February 20th, 1855.

‘MY DEAR SIR,

‘I am sorry that I did not attend to your request before, but I was not aware you were publishing so soon. My age is thirty-two. I was first attacked with rheumatic fever at the age of sixteen : was under medical treatment for two months : very much reduced. I did not regain my usual strength for six months. My next attack was at the age of thirty. I was under medical treatment for two months, during which time I suffered very much from palpitation of the heart, and acute pains in every joint. I was also greatly reduced—being scarcely able to walk at the expiration of that time. It was again six months before I regained my usual strength. My last attack was at the age of thirty-two ; and exhibited itself in the region of the heart and chest, and afterwards in the whole of the joints : which became hot and swollen, and were intensely painful ; so much so that I found it impossible to sleep without strong doses of morphia or opium—even these failed to produce sleep. I was under the old treatment for three weeks, when I made a desperate effort, and undertook the journey to Malvern, where, under the successful treatment of hydro-pathy, I was speedily restored. The treatment was as follows : I was packed in wet sheets three times a-day, for one hour each time, followed by the shallow-bath, at temperature of 65. I received very little benefit for two weeks. In addition, the painful joints were bandaged with wet cloths, and the body with a large compress. At the expiration of two weeks I took the shallow-bath, *cold*—(middle of December : and I here

take the liberty of recommending any one suffering from this complaint—in the winter—not to be deterred by the coldness of the weather from trying this remedy, as I am convinced the colder the water, the more efficacious, if the patient can bear it). During the first two weeks I had very little sleep, and it was with the greatest difficulty I could move at all: in fact, I was indebted to my bath-man for the duties of the toilette, etc. The third week exhibited more favorable symptoms. The pains in the joints were not so intense, and moved about from joint to joint. I also took more exercise, walking about four miles a-day. The fourth week I improved so rapidly that I was enabled to walk ten and eleven miles a-day with comfort. Enjoyed sound and refreshing sleep; and in the middle of the fifth week so far recovered, that I returned home. I still use the shallow-bath every morning, although the thermometer has been 15 degrees below freezing point. I should here observe that I took the douche-bath the last week of my stay with great benefit. The baths were at first irksome and painful, but gradually became less so: I afterwards enjoyed every bath, and looked forward to the wet-sheet packing with feelings of pleasure. But for real enjoyment I must give the preference to the douche. My object for thus particularising, is to induce any one who may know me, and are suffering from this complaint, at once to try the remedy.

‘I am, dear Sir, yours truly,

‘J. H. SMALL.’

There were many other morbid symptoms present,

such as fever, apyrexia, etc., which the patient has omitted to mention.

REMARKS.

According to Mr. Small's account of himself, and in the words of Hippocrates (speaking of the most perfect manner of healing the sick), he was cured 'tuto, cito, et jucunde' (safely, quickly, and pleasantly).

If we analyse this case we shall observe several points worthy of notice. *In the first place* (and most important of all), that the invalid was cured by *hydropathy*—although there were several circumstances in operation against so favorable a termination: thus—it was not till after he had been the victim of acute rheumatism three ^{or} several times that he put himself under the water-system: viz., at sixteen, at thirty, and at thirty-two years of age. The more frequently a man has been attacked with any disease the more difficult of cure does that disease become. A person, not uncommonly, recovers from a stroke of apoplexy, on its first attack;—the second time more rarely—and the third, seldom: hence the saying that when a man falls down in an apoplectic fit for the third time, he dies. Then again: this was not a case of simple rheumatism, but one in which the heart was implicated, so rendering the affection still more complicated and dangerous. Moreover, the disease had already run on for three weeks before the patient attempted its arrest by means of hydropathy. And again, the constitution had been more or less impaired, by the drugging it had suffered for the same length of time.

In the second place, we must notice the marked difference in the duration of the attacks when under the two systems of treatment. In the *first* attack, at the age of sixteen, the patient remained *two months* under medical care. In the *second* (at thirty) he was again two months before the affection left him. But how was it during the THIRD ATTACK? The patient was *well in four weeks and a half*.

In the third place, let us observe the effect of the two methods of treatment upon the *strength* of the patient. In the *first attack*, after the disorder had subsided, he was 'very much reduced,' and did not regain his wonted strength till after the lapse of *six months*, making in all *thirty-two weeks* from the first onset of the disease. In the second attack, when the rheumatism had been conquered (after *two months'* medical treatment) he found himself '*scarcely able to walk*,' and likewise remained debilitated for another *six months* (in all *eight months* since the commencement of the malady). In the *third attack* (treated by the water-cure), FOUR WEEKS AND A HALF had scarcely elapsed, from the time that the patient was first seized, before he 'was in the habit' of walking some TEN OR ELEVEN MILES DAILY.

In the fourth place, we have to remark that, when under the old method of physic, he took 'large doses' of morphia and opium (probably three-fourths of a grain of the one and two of the other), to procure him rest: these, 'even, failed to produce sleep.' When under hydropathy he took no drug, and after a short time 'enjoyed sound and refreshing sleep.' This fact shows us that hydropathy will induce sleep when drugs

fail to produce that enviable result: then, where is the utility of tormenting and teasing the brain with such poisons as morphia and opium? Drugs in vain attempted to bring on sleep: hydropathy succeeded in doing so.

In the fifth place, during the two former attacks he was treated by drugging, which invariably injures when unproductive of benefit; whereas during the last attack he was treated by water, which is *never* (properly handled) productive of injury.

In considering the best form of treatment to be pursued, it will be necessary to glance, in a very cursory manner, at the pathology of the disease in question—rheumatic gout. Acute rheumatism consists of an inflammation of certain fibrous tissues; and as these tissues are to be found in almost every part of the body, so rheumatism may attack one or many points; the shoulders alone, or, as in the case of Mr. Small, nearly every joint. As fibrous tissues are distributed in many places within the body, these may be affected as well as the joints; hence in the foregoing case the heart was also the seat of inflammation. Every joint attacked with rheumatism usually exhibits the four essential symptoms of inflammation — pain, heat, swelling, and redness. There is a remarkable tendency to metastasis—the affection rapidly shifting its position from joint to joint. Lactic acid is produced in great abundance. *Rheumatism* is universally admitted to be essentially an *inflammation*.

Gout bears some resemblance to rheumatism, but there are many distinctive differences between them. It is pretty generally believed, by the first pathologists

of the day, to be produced by a poison circulating in the blood. What this poison *is*, it is more difficult to determine; but it is certain that gout more frequently appears in the lithic acid diathesis than any other; and that this acid is found in great abundance in those attacked with this disease. Thus we find it in the urine, in the saliva, in the skin: and Berthollet has detected it, by means of litmus paper, in the joint affected. We must presume that this lithic acid is in some way connected with the morbid matter—perhaps the *materies morbi* itself; however this may be, there can be no doubt but that *gout* depends upon the presence of a *poison* in the system.

Rheumatic gout is a combination of these two forms of disease. It is both rheumatism and gout operating together at one and the same time.

We will next glance for a moment at the ordinary medical treatment of this affection. There are many different lines of practice. First: in *rheumatism*—some at the first onset bleed, give colchicum and Dover's powder; others calomel and opium, with sulphate and carbonate of magnesia—leech the part, apply poppy fomentations: then, after the lapse of a certain period, exhibit iodide of potassium and guaiacum mixture: then quinine. Dr. Wilson Philip, asserting that rheumatism arises from debility, administers nothing but iodide of potassium and guaiacum mixture three times a day, followed by quinine. Some give nothing but opium. Drs. Hope and Chambers administer calomel and opium alone. Others, again, order tartar emetic every four hours. And many rely simply upon acids, as the citrate.

Dr. Warren said the best treatment was six weeks.

The same conflicting opinions are equally observable in the treatment of *gout*. Thus, Watson recommends colchicum, and calls it specific; and immediately afterwards asserts that ‘a strong prejudice existed, and still exists, against the use of colchicum, among *some* practitioners. It was said that indeed it had the power of cutting short the paroxysm, but that it cut short the patient’s life also: that they who trusted to it for getting rid of the gout, very seldom lived more than two or three years afterwards. How far this is true I cannot tell.’ Many *never* bleed. Dr. Rush says that *venesection* is always *safe* and generally *serviceable*. Watson *recommends* purging. Sydenham *discourages* that practice. Cullen advises ‘patience and flannel.’ Heberden said that the physician knew not what would check it, and that as yet ‘no remedy had been found to cure gout.’ Thus, for every authority whom we can *quote recommending* a particular mode of treatment, there is almost invariably to be found another equally great authority *deprecating* that particular line of practice.

Now, by any thinking mind, there can be but one opinion formed respecting a practice so universally different in its nature as the one just detailed. I think we may justly conclude that, when men’s opinions concerning the management of a disease which is of extremely common occurrence and very easy of recognition, are thus undecided and conflicting—we may conclude, first, that no specific for that complaint has yet been discovered; and, secondly, that the disorder is not very obedient to any one particular form

of treatment: for we may be sure that, were a drug discovered really and unquestionably capable of arresting the course of the disease, it would speedily be known and embraced by the faculty—thus putting an end to these thousand and one discordant opinions.

Dr. Watson truly asserts that ‘medicines misapplied become poisons.’ It is unquestionably the fact; but, by admitting it, we encounter another difficulty, namely, who is to say whether the remedies *are* misapplied? Dr. A. declares them to be so; but then Dr. B. declares them to be *rightly* applied. We call in a third physician for his opinion, who says they are *neither* the proper medicines, but recommends some favorite drug of his own. It is very certain that all three physicians cannot be in the right, and consequently two of them must have prescribed ‘medicines misapplied,’ which, to repeat Dr. Watson’s words, must ‘become poisons.’ In point of fact, it can matter but very little under whose care an invalid with acute rheumatism places himself, for, since no two physicians agree as to the proper drug to be exhibited, it becomes impossible to discover either the correct doctor or serviceable medicine: hence it is a complete toss up. You may hit (by rare accident) the right nail upon the head, or you may not: no one can possibly divine before hand. What a lamentable condition of things is this! Can one any longer be surprised at so many throwing off the yoke of a system so confused, misty, and treacherous as this is? Is there not rather *greater* matter for surprise that so many should still continue in the same clouded track? A change must come, and that speedily.

The fact of there existing amongst medical men such diverse opinions, touching the correct manner of endeavoring to arrest the progress of the disease, I think sufficiently proves the inutility of the drug system, and the danger we incur in submitting ourselves to its action.

I imagine that this one argument alone is sufficient to show, to the candid thinker, that the usual drug treatment is both hazardous and incapable of curing acute rheumatic gout.

It only remains to say a very few words upon the hydropathic treatment. In the first place, the water-cure should be tried, because numerous cases have been cured by it in a very short space of time; second, because the orthodox routine fails to subdue it; third, because hydropathy can never 'become a poison'; and fourth, because its practice is dictated by reason, and upheld by common sense.

Acute rheumatic gout consists of inflammation; and the presence of a peccant matter in the system. I have already shown, in the Letter on Inflammation of the Eyes, that inflammation may be subdued by hydropathy; and, not to occupy too much of your space, I will refer you to that article.

It next remains to be seen whether the other portion of the affection—*gout*—can be reduced by the water-cure. Harvey, the great physiologist, recommended the joint attacked to be plunged in cold water.

There is a poison present in the system; and when this accumulates in any particular spot in greater abundance than in another (as in some joint) pain, etc.,

is there experienced. This is commonly supposed, by those who support the *humoral* doctrine (and I am among the number) to be an effort of nature to throw out the poison from the body, by bringing it to the surface, and thus allowing it to transpire through the medium of the skin. And this assumption (no doubt perfectly correct) was not only upheld by pathologists of ancient times, but it likewise is maintained by the majority of those of the present day. Dr. Holland, for example, has given to the world his belief in this doctrine—‘that a *materies morbi*, which, whatever its nature, is capable of accumulation in the system, of change of place with the body, and of removal from it.’ Dr. Watson says: ‘I am satisfied that the ancient doctrine, which asserts the humoral origin of the disease, is the true one. “*Morbific matter*” (it may well be called a poison) is generated, or detained, under certain circumstances, within the body, and silently collects in the blood, until, after obscure threats, perhaps, and prelusive mutterings, it explodes in the foot; and then the bodily economy, like the atmosphere after a thunderstorm, is, for a while, unusually pure and tranquil.’ In other words, a poison is present in the system, accumulates and concentrates in the joints, *comes out from the body*, and then the ‘bodily economy’ is *unusually pure*. Dr. Budd thinks that ‘some of these peccant or poisonous matters fix permanently in the affected spot or spots. . . . Others appear to be expended gradually in the part, and so eliminated from the system.’

It is very certain that, as long as the complaint lasts, this poisonous matter streams out from the system at

all points, for it can be detected in the breath, saliva, in the urine and skin; and it is no less certain that in the same ratio as the matter issuing from the system diminishes in quantity, does the disease become less virulent; and when, at length, no external trace of the deleterious principle remains, the affection also has vanished. Then, as we are taught by Nature (the best of all physicians), that the poisonous matter should quit the system by means of the skin, we ought to follow her wise counsel, and endeavor to assist her efforts in thus evacuating the deleterious substance from the system. This is to be accomplished through the medium of the wet sheet (principally), and other hydropathic appliances. The wet sheet acts, as I have shown in a former letter, by mechanically abstracting the poison directly from the body; but the other hydropathic means exert their beneficial influence through the whole animal economy, by cleansing the blood, and purging away the peccant matter therein contained; and, as Liebig has proved, by rapidly wasting away, and as quickly building up again, the entire fabric; thus getting rid of the old and vitiated blood, whilst its place is eagerly refilled by a new, pure, and healthy fluid,—in a sound condition, and well fitted for the vigorous maintenance of the vital forces. The blood—the *basis* of life—from impure has become pure, the diseased frame has again become whole.

‘The absurdity of the hydropathic treatment consists in its indiscriminate application to a great variety of diseases. No person, who has watched its operation, can deny that it is a remedy of a most powerful kind; and if its agency be fairly

tested, there is strong reason to believe that it will be found to be the most valuable means we possess for various specific diseases, which depend upon the presence of a definite materies morbi [poison] especially gout and common rheumatism.'

Dr. CARPENTER.

Yours sincerely,
W. ALFRED JOHNSON, M.D.

APPENDIX.

Description of the Hydropathic Processes

EMPLOYED IN THE PRECEDING CASES.

WET SHEET.

Two blankets, and a sheet which has previously been wrung out in cold water, are smoothly placed upon a mattress: the patient then lies upon them, the legs close together and arms folded over the chest: the attendant standing on the right side, lifts up and draws over and around the invalid the left hand half of the sheet, and tucks it firmly under the right side of the body; he then, passing over to the other side of the bedstead, repeats the process on the other side. He next places the upper end of the sheet tightly, though not inconveniently, under the patient's chin, so preventing, as completely as possible, the ingress of cold air. The lower end of the sheet is brought over the feet, and allowed to remain flatly upon the anterior surfaces of the legs. In the next place, precisely in the same manner, and one at a time, the patient is

enveloped in the two blankets upon which he is lying. A third blanket is then folded in two (double) and laid loosely upon the body, when a fourth single blanket is placed upon the third and closely tucked in all round, effectually pinning down the third. A last blanket then covers in the whole. If the thing be well managed the patient will find some little difficulty in getting out of his pack without the interference of the bath servant.

DOUCHE.

Through the upper part of the bath-house, by means of a pipe, a stream of water is conducted from a reservoir, and falls upon the patient. The bore of the pipe is from one to about three or four inches in diameter. As the column of water flows from a considerable elevation it descends upon the body with considerable force. The patient first allows it to fall upon his hand, then wrist and fore-arm, gradually advancing directly under the stream; when fairly beneath it, he slightly moves his body to the left and right, forwards and backwards, permitting the water to play upon the back, chest, shoulders, etc., carefully avoiding the head, lest from the weight and strength of the blow it should become injured.

SHALLOW BATH.

An ordinary tin bath, about five feet long and three wide. Cold water to the depth of about four inches is put into the bath. The patient sits in this; and, with a rough towel that is in the water, well rubs himself (both legs and body) with it; continually dipping the towel into the water. The bath servant, standing behind, in the like way vigorously applies another

towel to the back. This is continued for a certain time (two or three minutes), when the patient gets out of the bath and stands upon a dry towel. A large dry sheet is then thrown over him, by means of which the water is rubbed off and the skin dried. As quickly as possible the patient dresses himself, and runs out of the house, to take his exercise after the bath.

PAIL DOUCHE.

This is a douche upon a smaller scale. The bather sits in a dry bath, when the servant comes behind and throws over him a pail full of water; the same thing is then applied to the front part of the body; to be repeated back and front alternately till the number of pails of water ordered have been used. He quickly dries himself, as after the shallow, and takes his exercise.

SITZ.

This, as the name implies, is a sitting bath. A round tin bath, with a back to it, about three feet across at the top, and a foot and half at the bottom. It is filled to the depth of six inches with water. The patient sits in it as he would in a chair with the bottom taken out. To prevent him from becoming chilled, a thick blanket or two are thrown over his shoulders. After the proper time have elapsed, he takes a brisk walk, or otherwise exercises himself.

WASH-DOWN.

The patient stands in a shallow bath, in the corner of which has been placed an ordinary foot bath, filled with water. He takes a coarse towel, and, stooping

down, dips it in the water, and, using a considerable amount of friction, rubs himself with it until he becomes slightly warmed. The bath attendant, standing behind, performs the same operation upon the invalid's back. This process is repeated as often as has been prescribed. Then, drying himself with the sheet, goes for his walk to get up the reaction.

HEAD DOUCHE.

Baring his neck and kneeling down upon the ground, the patient hangs his head over the side of the bath, looking towards the bottom. The bath man then pours over the head, with moderate rapidity, one, two, or three pails of water, as may have been ordered. The head is or is not to be well dried after it:

HALF-WET SHEET.

The only difference between this and the ordinary wet-sheet is, that in the former only half the body is packed. The sheet, in lieu of being brought up to, and under the chin, only reaches as far as the arm pits, and the arms are allowed to be outside the sheet; and it also only extends as far as the knees downwards. The sheets and blankets are, as much as it is possible, arranged in like manner as the common wet sheet.

WET COMPRESS.

This is a stout broad piece of linen (which is made moist) incased in oil silk: but a very simple and efficient compress can be more readily employed — as follows: Get a piece of sheeting, about four or five yards long, and one foot broad. Dip one end of it into

water, to the extent of about two yards ; wring it out ; and wind it round the body, so that it may cover the whole abdomen, commencing with the wet extremity. Of course, when the whole is wound round, the wet part of the bandage will be in direct contact with the skin, and covered over with the dry part. It is then to be fastened by strings. This may be applied to any part of the body, as head, neck, arm, chest, etc., the width only being regulated. When the compress becomes heated and uncomfortable, it is taken off, and again plunged into the cold water. This is repeated as many times during the day or night as may have been advised.

VAPOR.

The patient sits upon a cane-bottomed chair, in a kind of wooden box, about five feet high, and four wide. The lid is composed of two pieces, both admitting of being detached. In the middle and at the side, a semi-circular piece of wood, in the shape of a half-moon, is cut. A similar piece is taken out of the other half of the lid ; so that, when the two are placed together endwise, there is a round hole cut out of the centre. The box opens also by two doors in front. The patient enters the box, sits down upon the chair, and closes the doors after him : the bath-servant then puts on one half of the top, the semi-circular hole of which corresponds to, and is in opposition with, one side of his neck. He then puts on the opposite half of the lid, the semi-circular hole in which corresponds to the other side of the neck. Thus he is completely shut up in the box, except his head, which is protruding

through the round hole in the centre of the lid. By means of certain apparatus, steam is generated and directed through a small pipe, into this box, and allowed to accumulate. After the lapse of a certain time, more or less according to the condition of the patient, a perspiration breaks out on the surface. This is permitted to increase or decrease according to the wishes of the physician. When the patient comes out he either dresses at once, or takes some cold bath—as wash-down or plunge. He then takes his exercise.

TOWEL-PACK.

This is very similar to the half-sheet.

PLUNGE.

There are but few who are unacquainted with the nature of the plunge-bath. The bath is some eight feet long, four deep, and six wide. The patient, fresh from exercise, jumps into the water; remains in for about half a minute, quickly dresses, and again goes for his exercise, to promote the reaction.

THE END.

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